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The Nebraska State Medical Journal

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The Nebraska State Medical Journal

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EDITORIAL

THE NEBRASKA CAPITOL

The new cover of the Nebraska State Medical Journal, beginning with this issue depicts one of the World's most beautiful government buildings, the Nebraska Capitol. As is true in the case of many other famous buildings, the Nebraska Capitol attracts far more attention from visitors than it does from citizens of Nebraska. The building is in the form of a cross in a square with four interior courts. It was designed by Bertram Goodhue who had as assistants, Lee Lawrie, sculptor, August Vincent Tack, mural artist, and Hildreth Meiere, designer of the tile and mosaic. The base of the building is two stories high and is 437 feet square. The tower is 400 feet high and at its top is the Sower (which was designed by Lee Lowrie).

The construction of this building took ten years at a cost of $10,000,000, and was under the direction of William Younkin. The building was fully paid for at the time of completion in 1932. The source of this income was a special capitol levy.

In addition to the Governor and State Engineer, the other capitol commission members were W. E. Hardy, Lincoln, W. H. Thompson, Grand Island, and Walter W. Mead, Omaha. During the course of construction the governors in office were Samuel R. McKelvie, Charles W. Bryan, Adam McMullen and Arthur J. Weaver. The engineers were George E. Johnson and Robert L. Cochran. The responsibility for the inscriptions and symbols used on the building was that of Hartley Burr Alexander of the University of Nebraska. The terms of the commission by which the architect was chosen was the responsibility of Thomas R. Kimball of Omaha.

Two additional commissions were created by the 1949 Legislature. (1) The Capitol Commission, responsible for the completion of the panels and murals in the rotunda of the State Capitol and (2) the State Building Commission, responsible for repairs and improvements of the building in excess of $10,000.

The present photograph on our new cover was taken from a point west of the Capitol Building and includes the famous statue of Abraham Lincoln.

We wish that our Journal might come to be as distinctive among medical publications of its class as our capitol is among the great government buildings of our nation.

—J.M.N.

THE WOMAN'S AUXILIARY

By definition an auxiliary is "that which aids or helps." Nearly every doctor has been fortunate enough to have an "auxiliary" of his own — a wife who "aided" and "helped" him with the care of the sick and with his public relations. It was not, however, until 1922 that doctors' wives banded themselves together into the Woman's Auxiliary to the American Medical Association, and only three years later that the first steps were taken to form the Nebraska chapter of this organization.

It naturally required time, thought and effort to effect an organization, to interest doctors' wives over the whole state and nation and to work out a program of activity which was consistent with the traditional position of the doctor's wife in the community. I think a quotation from an Auxiliary column in the Nebraska State Medical Journal written by Ruth Sachs in 1944 bears out this opinion.

"When the Woman's Auxiliary to the American Medical Association was organized in 1922, we were then finished with a war, had survived a mild depression, and prosperity was 'among us.' Our first thought was to stress social significance of an organization of wives of the profession for the purpose of making new acquaintances, and helping to entertain during the State, County and National assemblies . . ."

A perusal of the earlier Auxiliary columns in the Journal reveals pretty much a record of "teas" and similar gatherings and seems to bear out Mrs. Sachs' statement. At the same time one notes a constant and increasing undercurrent of development of serious plans aimed at "aiding" and "helping" the medical profession to spread the propaganda of health, to unite the medical profession in its non-professional activities, and to combat the attempted inroads of a socialist minded government on private enterprise, especially upon the medical profession.

This tendency is clearly depicted in the history of the first decade of the Nebraska Auxiliary compiled by Helen Rogers, of Lincoln, which began with a presentation of the "idea" by Mrs. F. A. Long of Madison on May 13th, 1925 and was followed on the next day by a meeting at the home of Mrs. J. E. M. Thomson of Lincoln for the purpose of forming such an organization.

Now, a quarter of a century later, the Auxiliary has come of age. There are approximately 530 members in Nebraska, and fourteen county or multiple county organizations. The members still have their fun, as indeed we all do, but they have many down-to-earth projects dealing with various aspects of health. They are a constant and valuable source of help in the public relations of the medical profession, and they take their responsibilities seriously.

Members of the medical profession should, in turn, take the Auxiliary seriously. There may have been a time when we felt that the Auxiliary would never outgrow the "tea" stage and we were not inclined to believe that they would ever be such a real assistance as they have proved to be. The writer is informed that the California doctors think so much of their Auxiliary that they give them five thousand dollars a year for use in their work. Our State Medical Association is small in comparison with California, and perhaps not as rich in proportion but might we not do something in the way of giving financial help to our Auxiliary? After all, they struggle along with so little money that they can not afford to make the necessary liaison with the National body, send delegates to PR conferences, etc. It seems to the writer that this would be a wonderful Public Relations investment.

EVIDENCE THAT BABY'S BLOOD CAN ENTER MOTHER'S CIRCULATION SEEN AS OUTSTANDING 1952 OBSTETRICAL ADVANCE

Evidence that red blood cells from an Rh-positive baby can enter the mother's blood stream and sensitize Rh-negative women during pregnancy is described as "surely one of the most important contributions to obstetrics of 1952," by Dr. Nicholson J. Eastman, professor of obstetrics at Johns Hopkins University Medical School, writing in a recent issue of Obstetrical and Gynecology Survey.

For the first time perhaps, there is "fully convincing evidence" that fetal cells frequently escape through the placental barrier and give the mother tiny transfusions of the infant's blood, says Dr. Eastman in editorial comment on recent findings by Dr. Carl T. Javert of Cornell University Medical College.

Seeking to explain why some Rh-negative mothers cannot bear more than one healthy baby, Dr. Javert studied 1,901 placements. His analyses, Dr. Eastman states, "throw light on the fundamental processes involved in erythroblastosis."

In this disease, maternal antibodies attack the infant's red blood cells. Dr. Javert assembled evidence that these antibodies are produced by the mother as a defense against transfusions of Rh-positive blood, including transfusions occurring when the baby's blood escapes into the maternal circulation. He traced the escape route through points of breakage at fragile capillary junctions (trophoblastic endothelial junction), where only two cell layers separate one blood stream from the other. Once the mother is sensitized, the resulting antibodies are capable of destroying fetal blood cells in later pregnancies.

"Preservation of the trophoblastic endothelial junction should be attempted in the very first pregnancy especially if the patient is Rh-negative," Dr. Javert reported (in Surgery, Gynecology & Obstetrics, 94:257-266, 1952). He added that "treatment, consisting of an adequate diet including citrus fruits and their concentrates and vitamin C supplement, has been used on 25 patients with promising results."

Dr. Eastman also comments that the Javert paper "helps to correct the maze of misconceptions which have long shrouded the subject of red infarcts." Four times out of five, where erythroblastosis was present in the infant, the Cornell researcher found these red infarcts, or intervillous hematomas in the placenta. Most placentas of normal pregnancies did not have these hematomas.

"The correlation of the escape of erythrocytes with this coagulative process makes the whole phenomenon, to me at least, more understandable," writes Dr. Eastman.

Certain Radiological Aspects of Abdominal Pain In Children*

CARROLL Z. BERMAN, M.D.
Departments of Pediatrics and Radiology of the Boston Dispensary
Boston Floating Hospital and Tufts College Medical School
Boston, Massachusetts

Doctor Berman states that about four and one-half per cent of children admitted to the Boston Floating Hospital have acute abdominal pain as the presenting symptom. In ten per cent of these, routine anterior-posterior x-ray projections in supine and erect positions furnished the only or the most significant diagnostic information. His case reports embrace many clinical entities the underlying pathology of which is in the gastrointestinal tract, the urinary tract, or outside the belly, such as lobar pneumonia. The many excellent illustrations add greatly to the value of this discussion.

EDITOR

In the three years, 1948-1951, there were 4,724 admissions to the Boston Floating Hospital. In 219 of these cases (approximately 4.5 per cent), abdominal pain was the chief complaint or one of the important features of the clinical picture as noted on admission. In fifty-nine of these, the diagnosis of acute appendicitis was confirmed pathologically after appendectomy had been performed. A large number were discharged as "abdominal pain of unknown etiology" or "gastro-enteritis." In twenty-two cases, radiography provided either the only clue or the most significant data leading to the final correct diagnosis, and in a great number of others it supplied valuable negative information.

In infants and children, abdominal pain may be the presenting symptom with disease primary in almost any system of the body. In the private practice of the average pediatrician, the majority of cases are associated with such common ailments as upper respiratory infection, the infectious diseases and gastro-enteritis. Among hospital patients, abdominal pain seems most often to imply a disturbance in the gastrointestinal or urinary tract. But one must always be alert for the cases of lobar pneumonia, acute rheumatic fever and other medical diseases which present themselves first as acute abdominal conditions.

The most useful and the simplest radiographic procedure in the study of a pediatric case of abdominal pain is examination of the abdomen by means of films in anterior-posterior projection. When routinely employed in both the recumbent and erect positions, these often provide information not elicited by even the most thorough clinical examination.

In radiographs of the abdomen, of particular importance are the contours of the solid viscera, including the liver, spleen and kidneys, but of even more significance is the gas pattern formed by the stomach and intestines. Occasionally, an unusual calcific shadow provides important information, and the upright film may supply an unsuspected diagnosis by the demonstration of free gas within the abdomen. Deviations from the normal are usually grossly evident and the absence of any indication of abnormality is of definite clinical value.

Besides yielding diagnostic clues the plain films of the abdomen often provide the indications for the next procedure, such as barium enema, barium meal or intravenous pyelogram.

The following cases are not intended to cover the field completely but have been selected because they are typical examples of the application of the procedures:

Figure 1 shows films of the abdomen of a five-year-old male child who entered the hospital because of intermittent crampy abdominal pain of one week's duration.

There is considerable gas in the bowel and some distension — certainly more than one usually sees in a normal child — and even a few intestinal fluid levels in the upright film. But a sick child often swallows enough air to produce this appearance and the characteristic pattern of ileus or mechanical obstruction is not present. Note the well-defined shadows of the liver and spleen. These are entirely normal. This youngster rapidly recovered on simple supportive measures and the discharge diagnosis was acute gastroenteritis.

In Figure 2 are seen the films of the abdomen of a three-year-old boy who was referred to the hospital because of abdominal pain of three days' duration. Here, there are markedly dilated segments of small intestine arranged in a series of transverse loops in the upper half of the abdomen. The upright film shows multiple fluid levels within the gut and there is no demonstrable gas about the periphery where the colon usually lies. This appearance is diagnostic of small bowel obstruction. Surgical exploration revealed a volvulus of several loops of small intestine about a fibrous band running from a Meckel's diverticulum to the umbilicus.

---

*Read before the Annual Session of the Nebraska State Medical Association May 13, 1952.

The next case (Figure 3) was a three-year-old who entered the hospital with the complaint of abdominal pain, vomiting and fever up to 102° for six days. These films show a few markedly dilated bowel segments containing fluid levels and lying high in the left upper quadrant. The distended loops show the characteristic pattern of jejunum and there is practically no gas elsewhere in the

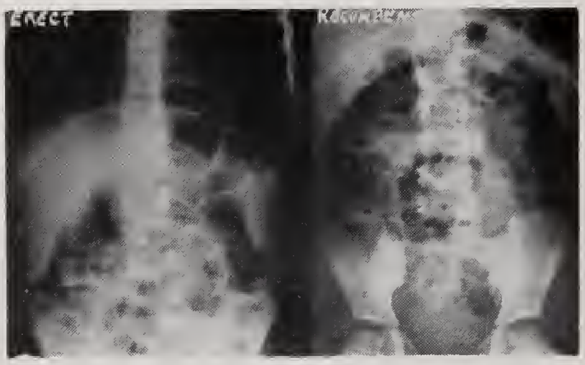

Figure 1. Acute Gastroenteritis. There is moderate gaseous distension of the bowel and fluid levels in the erect view, but the characteristic pattern of ileus is not present.

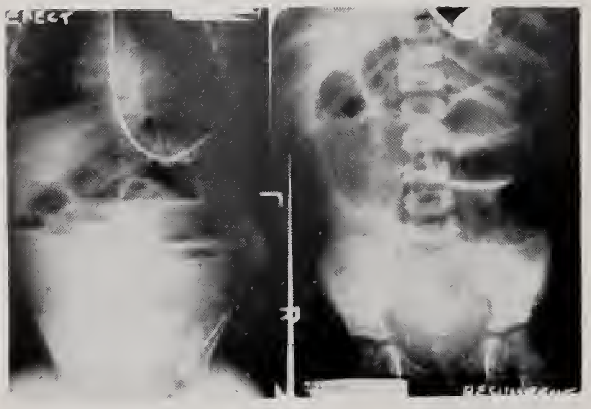

Figure 2. Volvulus of the Small Intestine. The classical radiographic findings of small bowel obstruction are well illustrated. These are: (a) distended small bowel arranged in transverse loops, (b) well-defined intestinal fluid levels in the erect film and (c) absence of gas in the colon.

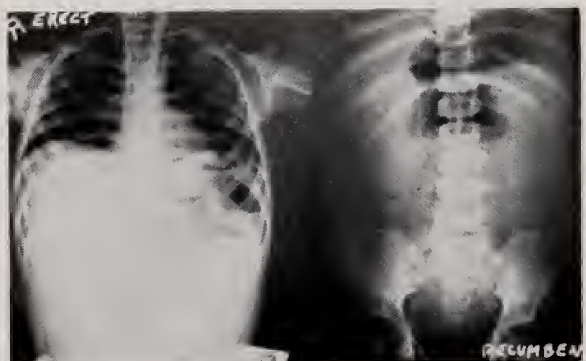

Figure 3. High Jejunal Obstruction. The two markedly distended bowel segments lying high in the abdomen have the characteristic pattern of jejunum. There is a striking absence of gas elsewhere in the abdomen.

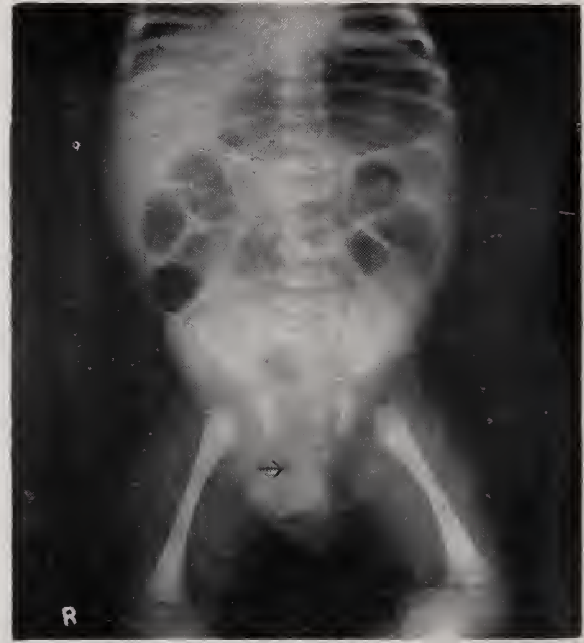

Figure 4. Incarcerated Inguinal Hernia in a Two-Week-Old Infant. The diagnosis is based on the presence of a bubble of gas within the scrotal sac (see arrow) in association with the findings of small bowel obstruction.

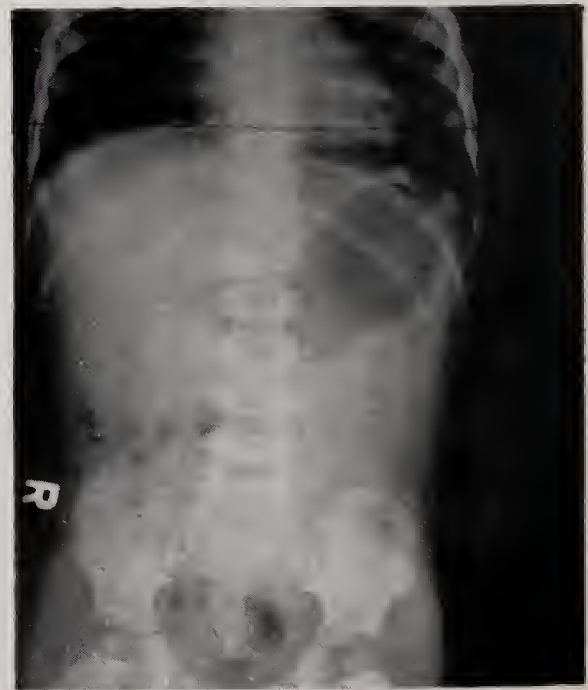

Figure 5. Intussusception — Plain Film. The clinical impression was supported by this radiograph of the abdomen which showed absence of colonic contents on the right side and their presence on the left. The diagnosis was confirmed by barium enema.

abdomen. This is an unusual picture and indicates an obstruction high in the jejunum. On entering the abdomen, the surgeon encountered a large appendiceal abscess which had infiltrated in and around the large bowel and most of the small intestine binding them together in a mass which excluded only a few loops of jejunum.

Figure 4 is a recumbent abdominal film of a two-week-old male infant who was referred to the hospital because of apparent abdominal pain, vomiting and obstipation for two days. On physical examination, the abdomen was markedly distended. The right side of the scrotum appeared inflamed and contained a palpable mass which seemed to extend into the abdomen. Note the marked distension of small bowel loops and the absence of gas or fecal material in the colon. The arrow points to a bubble of gas within the scrotal sac which is indicative of an inguinal hernia. The clinical diagnosis of an incarcerated inguinal hernia was confirmed at surgery.

The next group of illustrations were chosen to demonstrate the radiographic features of a disease which is the commonest cause of acquired intestinal obstruction in infancy.

Figure 5 is an anterior-posterior recumbent view of the abdomen of a two-year-old male child referred because of crampy abdominal pain for the preceding 24 hours. On routine examination in the doctor's office the day before admission he had appeared entirely well. Half an hour later, while riding home in the family car, he suddenly doubled up with abdominal pain which subsided in about a minute but recurred twenty minutes later. These attacks were noted every ten to thirty minutes and persisted until hospital entrance.

Here there is no specific abnormality of the intestinal gas pattern. The only notable feature is the absence of demonstrable colonic contents on the right side of the abdomen and their presence on the left. In association with the clinical story which was highly suggestive of intussusception, this was corroborative evidence. The next indicated procedure was a barium enema which established the diagnosis.

Figure 6 (A,B and C) are reproductions of films made during a barium enema performed on a 3½-month-old male infant who had the classical symptoms and findings of intussusception. He had been well until eight hours before admission when he began to cry with a loud shriek and refused all food. There were intermittent periods of apparent comfort but continuous anorexia. A small amount of blood was noted on the diaper and the attending physician felt a sausage-shaped tumor in the right upper abdominal quadrant.

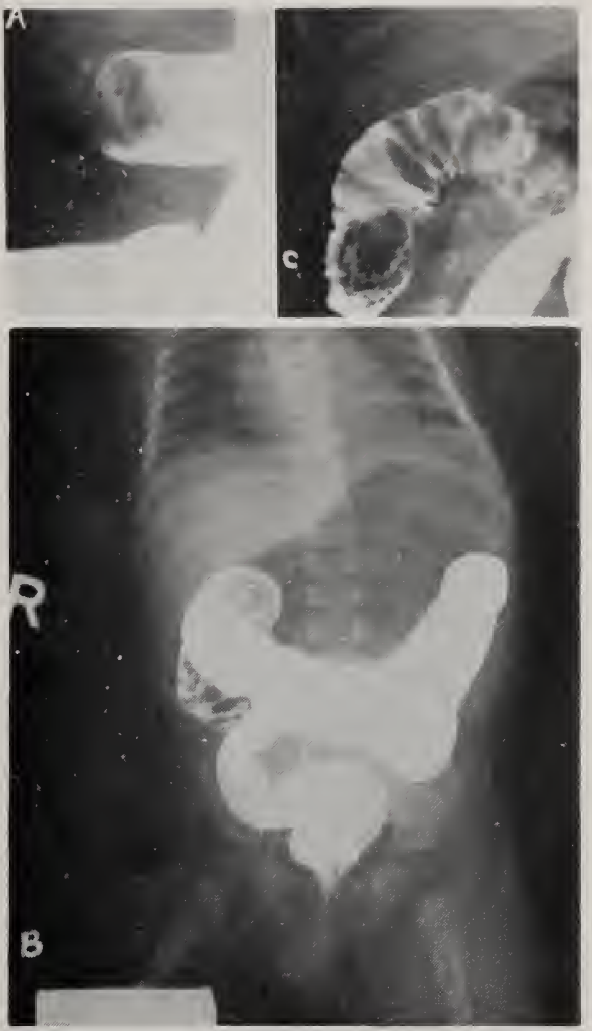

Figure 6. Intussusception — Barium Enema. (A) This is a spot film made just as the tumor was encountered. (B) The cecum and ascending colon are occupied by a mass about which the injected barium has attempted to make its way. (C) This is a spot film made after evacuation. The involved segment of bowel remains filled by the tumor in contrast to the adjacent emptied portion. The classical "corkscrew" appearance is produced by a coating of barium retained in the sleeve of gut surrounding the intussusceptum.

Figure 6A is a spot film made just as the obstructing mass was encountered. Figure 6B shows the cecum and entire ascending colon to be occupied by a filling defect about which the injected barium has attempted to pass. This has produced the characteristic corkscrew pattern which often is best demonstrated after the child has been allowed to evacuate. Figure 6C is a spot film made after evacuation. Note that the segment of colon occupied by the intussusception does not collapse as does the adjacent normal portion of the bowel. It remains filled and outlined by the coating of barium which has made its way down the sleeve of gut surrounding the intussusceptum.

In addition to the obstructive lesions, radiography is often of suggestive or corroborative aid in other diseases of the gastrointestinal tract. One does not usually think of acute appendicitis as a diagnosis to be made by means of x-ray films. In the usual case, there is a nonspecific radiographic picture not unlike that seen in gastroenteritis. There may be mild distension of small and large bowel and perhaps a few intestinal fluid levels in the erect film. This is the result of paralytic ileus and the gas-containing bowel is almost never distended to the extent that one sees in mechanical obstruction. A similar apparance may be encountered in the course of almost any disease in which reflex impairment of intestinal motility occurs.

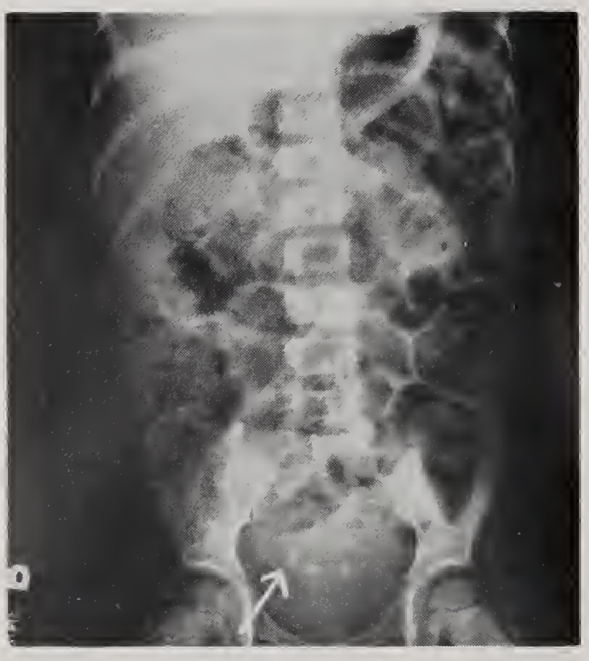

Figure 7. Acute Appendicitis. The clinical diagnosis was supported by the presence of an appendiceal fecolith in the right side of the pelvis (see arrow).

Occasionally, however, there is an x-ray finding which may be extremely helpful particularly in cases having atypical symptomatology. This is illustrated in the case of a four-year-old child who entered the hospital because of abdominal pain, nausea and vomiting for eight days. His symptoms had become much worse in the three days prior to admission but there were no localizing abdominal signs. The admission white blood cell count was 8,000 and it rose to 12,000 the next day. In the abdominal film of this patient (Figure 7) there is a nonspecific intestinal gas pattern and the colon appears loaded with fecal material. However, one notes a calcium-rimmed opacity in the right side of the pelvis which has the characteristic appearance and location of an appendiceal fecolith or appendicolith. This was considered strong support for the diagnosis of acute appendicitis which was confirmed at surgery.

The next case is presented because the x-ray films depict very graphically one of the complications of acute appendicitis. This is a twenty-month-old female infant who had become cranky, restless and anorexic two weeks prior to admission. Her temperature rose to 105° and then the symptoms subsided. One week before entering the hospital she began to complain of pain on urination and vague abdominal pain in the right flank. On admission there was tenderness and spasm and a well-defined mass in the right lower quadrant. Figure 8 shows the basis of the entire clinical picture as seen on a

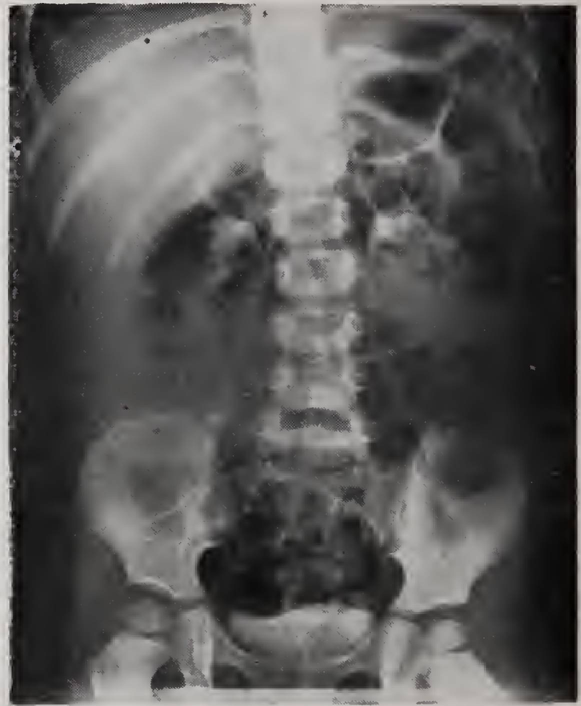

Figure 8. Appendiceal Abscess. Note the small rounded calcific density within a much larger soft tissue mass in the right lower quadrant (original film retouched). Surgical exploration revealed an appendiceal abscess containing a fecolith and lying close to the course of the right ureter. This single film from the intravenous urogram explains the entire clinical picture of fever, pain on urination and a tender mass in the right flank.

single film from the intravenous urogram. Note the small rounded calcific density lying within a much larger soft tissue mass in the right lower quadrant close to the course of the right ureter. At surgery, this proved to be an appendiceal abscess containing a fecolith. The urinary symptoms may be explained by the proximity of the mass to the right ureter.

In an abdominal pain problem with an equivocal clinical picture, when the plain films of the abdomen are not diagnostic, the intravenous urogram has repeatedly been shown to be a most rewarding procedure.

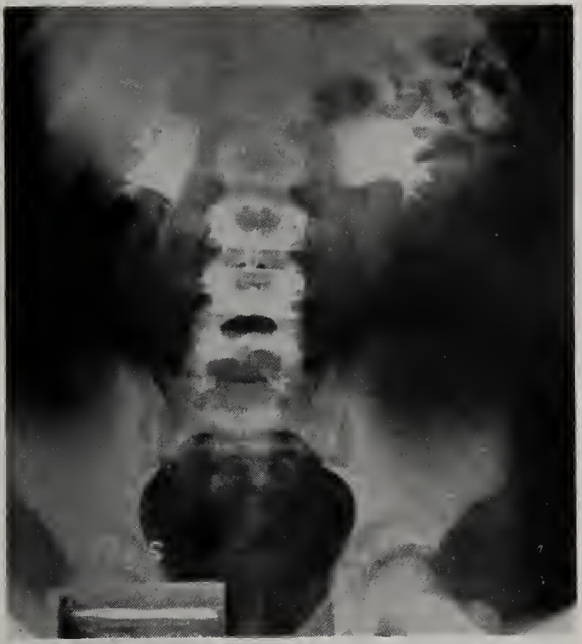

Figure 9. Bilateral Ureteropelvic Obstruction. The symptoms were localized on the left. An aberrant vessel encroaching on the ureteropelvic junction was surgically divided on that side and there has been complete relief.

This is illustrated in the following cases:

The first of these children was an eight-year-old boy who entered the hospital for study because of intermittent left lower quadrant pain and nausea for two years. There were no urinary symptoms associated with these episodes. They occurred at monthly intervals, lasted about three days, and on at least one occasion there was said to have been pus in the urine. Figure 9 is a film from the intravenous urogram showing evidence of obstruction at each ureteropelvic junction. This was confirmed by means of retrograde pyelography. Because the child's clinical symptoms were localized on the left, that side was explored and an aberrant vessel obstructing the ureteropelvic junction was divided. There has been no recurrence of symptoms.

Figure 10 shows films from the urographic study of a nine-year-old girl referred because of episodes of fever of unknown etiology. These are presented to illustrate a condition which predisposes to urinary tract infection and is often the cause of obscure abdominal pain. There is a double pelvis and ureter on the left side which was suspected from the intravenous examination (A) and confirmed by the retrograde study (B). This child could have remained entirely free of any trouble related to this condition, but as is often the case, she was subject to repeated urinary tract infections. It is of interest that there is no indication on the films that any significant damage has occurred in the renal collecting system.

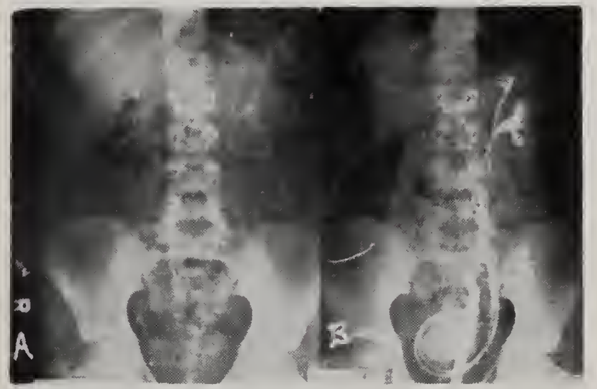

Figure 10. Duplication of the Renal Pelvis and Ureter. This child was subject to repeated urinary tract infections but there is no radiographic evidence of gross damage to the renal collecting system.

The next case, however, shows the type of difficulty to which an anomalous upper urinary tract predisposes a child. Figure 11A is the thirty-minute film from the intravenous urogram of a four-year-old girl who had been having episodes of right lower quadrant pain, nausea and vomiting for two years. Note that on the right side the collecting structures appear small in proportion to the renal outline and that the upper pole of the kidney appears not to have been provided with calices and pelvis. The right ureter appears normal. Figure 11B shows the film made two hours after the dye injection. Here a large hydronephrotic sac has been filled on the right and appears to represent the pelvis and calices of the upper pole of the kidney. In addition, there is visualized a portion of markedly dilated ureter emptying into the bladder on the right side. The obvious explanation is that this child had a double ureter and pelvis on the right side just as in the previously shown case. In this instance, however, obstructive uropathy had developed leading to the episodes of right lower quadrant pain. It is an interesting fact that in this type of anomaly when obstruction and infection occur, the upper segment is practically always the one involved.

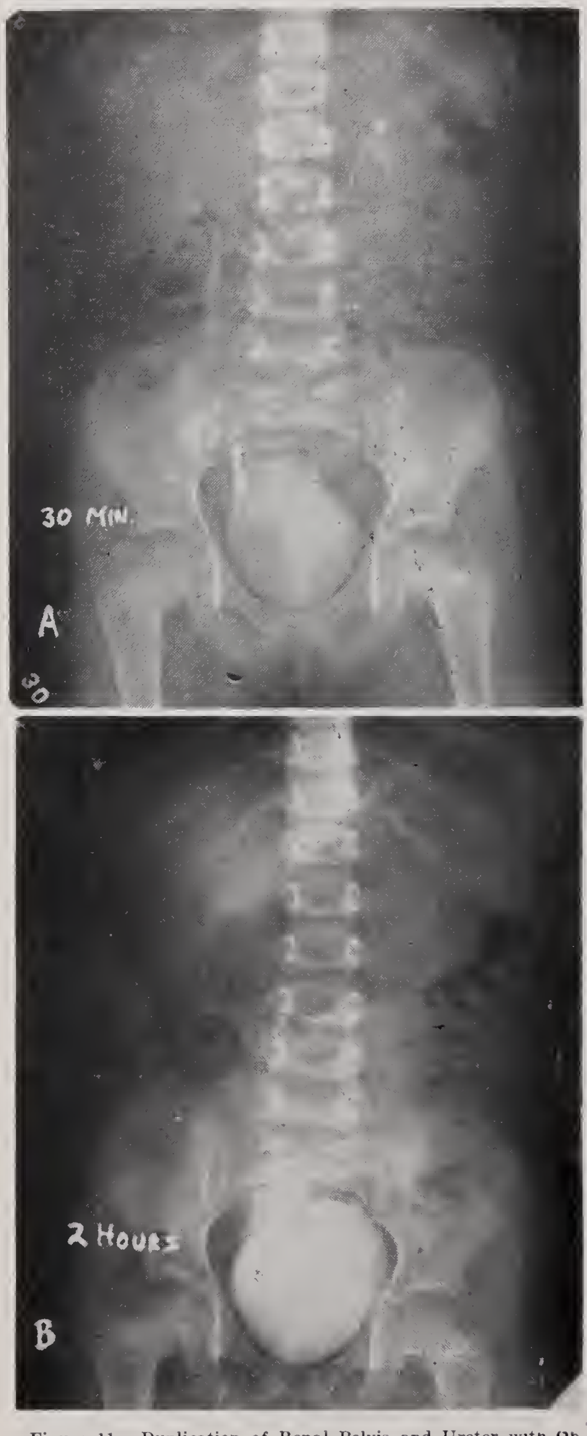

Figure 11. Duplication of Renal Pelvis and Ureter with Obstructive Uropathy. In the thirty-minute film (A) The inferior division of the right double ureter and pelvis is filled and appears normal. (B) Two hours after the dye was injected, the superior hydronephrotic portion is visualized.

A somewhat different situation was presented by an eight-year-old girl who was hospitalized because of pain in the left upper abdomen and fever for one week. There was persistent left flank tenderness but repeated studies showed only a few white blood cells in the urine and urine cultures were consistently negative. Figure 12A is a film from the intravenous pyelogram which revealed slight blunting and enlargement of the calices and pelvis of the left kidney. Figure 12B shows the retrograde study which confirmed the mild left hydronephrosis but unfortunately failed to demonstrate the underlying basis of the obstruction. Surgical exploration revealed a large perinephric abscess surrounding the posterior aspect of the lower pole of the left

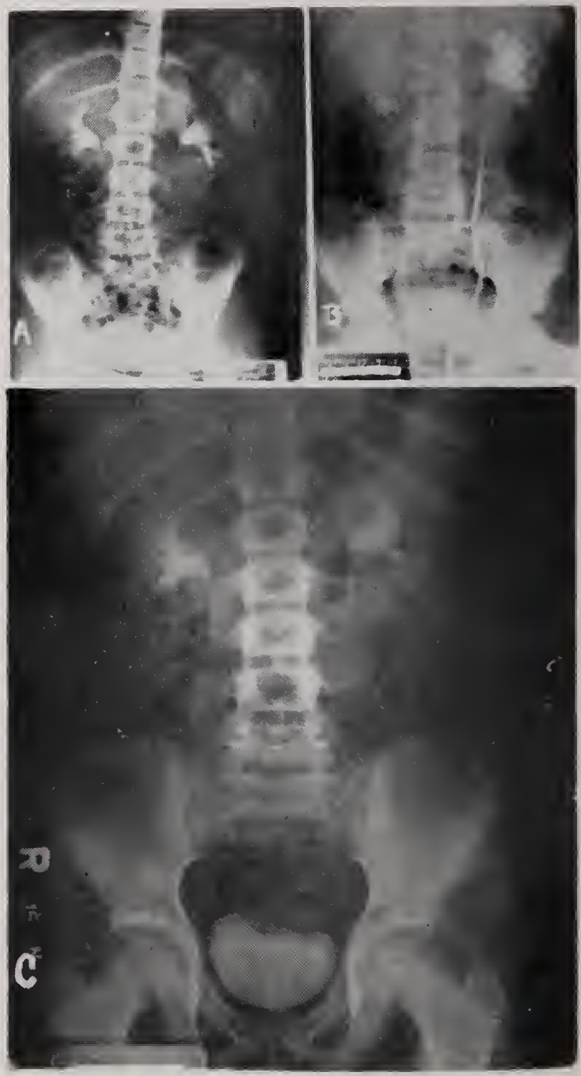

Figure 12. Perinephric Abscess. Films from intravenous and retrograde urographic studies (A & B) showing mild left hydronephrosis due to a large perinephric abscess on the posterior aspect of the lower pole of the kidney. (C) A post-operative film shows the left upper urinary tract to appear entirely normal.

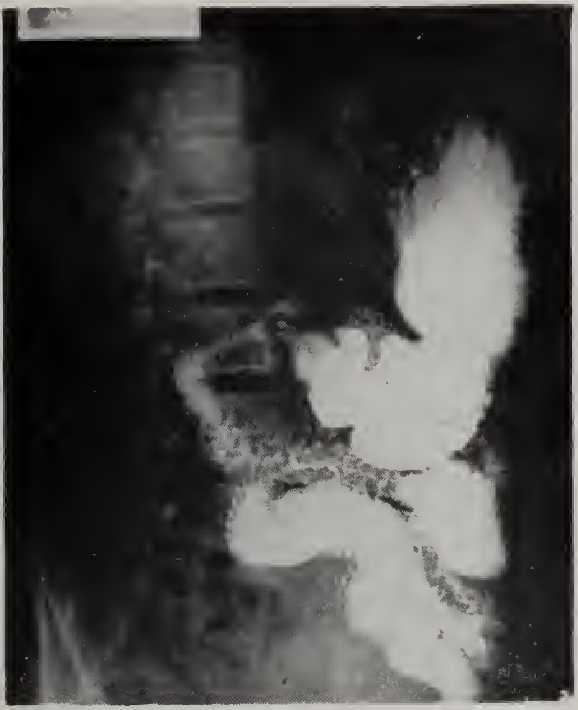

Figure 13. Active Duodenal Ulcer in a Thirteen-Year-Old Boy. This boy had had chronic abdominal pain since the age of three or four years. There is a typical ulcer crater surrounded by a rim of swollen mucosa within the duodenal cap.

kidney. This was drained and the child made an uneventful recovery. Figure 12C is a representative film from the follow-up study showing an entirely normal-appearing left upper urinary tract.

In certain cases, the symptom complex indicates that the next logical step after the plain abdominal film is a barium meal examination or upper gastrointestinal series. An example of this was the next case, a thirteen-year-old boy who had had a chronic abdominal pain since the age of three or four years. Preliminary films of the abdomen showed no evidence of abnormality. Figure 13 is a film of the barium-filled stomach and the duodenal bulb with the latter deformed by scarring and demonstrating a typical ulcer crater.

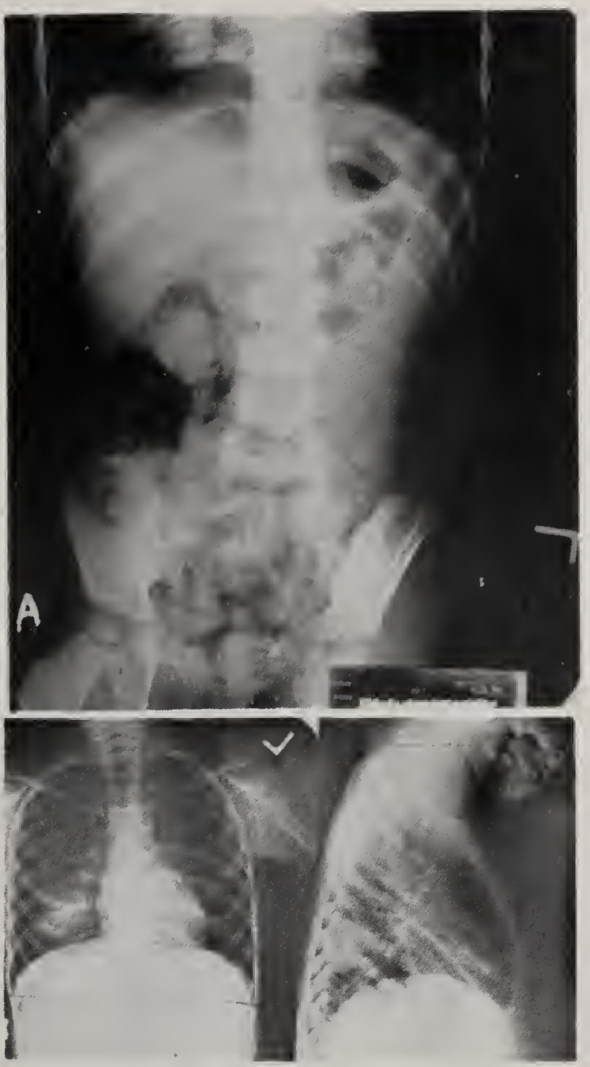

Figure 14. Lobar Pneumonia. (A) A pneumonic infiltration in the right lower lobe is barely made out on this film of the abdomen made initially because the symptoms were very suggestive of gastrointestinal disease. (B) The right lower lobe infiltration noted on examination of the abdomen is well shown on films of the chest.

The final example is one of an acute medical disease in which abdominal pain is occasionally the presenting symptom. This three-year-old girl was referred to the hospital because of abdominal pain, fever and vomiting for three days. Figure 14A, a film of this child's abdomen, shows no definite evidence of abnormality at first glance. However, careful scrutiny reveals a density in the right lower lung field having the characteristic appearance of pneumonia. Figure 14B shows the typical lobar pneumonia in the right lower lobe. It is not rare for pneumonia in this location to be first manifest by abdominal pain referred to the right side. This is generally believed to be due to projection of the pain through the vagus nerve, and the abdominal symptoms encountered in many of the medical diseases are probably produced by the same mechanism.

In conclusion, it cannot be overemphasized that the x-ray procedures discussed are most useful when interpreted in the light of careful clinical evaluation. They are intended to supplement and not replace the thorough history and physical examination. But familiarity with the indications for the various radiographic studies and a knowledge of their potentialities is of considerable value. Their use in the presence of abdominal symptoms may often establish a diagnosis not revealed by the usual clinical methods.

Differentiation Between Causes of Atrophy of the Intrinsic Muscles of the Hand*

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The patient who consults his physician because of weakness or atrophy of the intrinsic muscles of the hand affords that physician an excellent opportunity to make a carefully analytical study of the various etiologic possibilities and to reach a sound diagnosis based on definite neurologic criteria.

The varied lesions productive of such a complaint may be grouped conveniently into five major categories, based essentially on anatomical divisions of the involved neuromuscular mechanism. These categories, then, consist of: disorders within the muscle itself; disorders in the relevant peripheral nerves, (the median and/or ulnar nerves); disorders in the brachial plexus; conditions involving the related nerve roots, (eighth cervical and/or first thoracic); and diseases affecting the spinal cord at these levels.

This presentation will concern itself primarily with the latter four categories, all of which could be described as neurogenic atrophies.

The first category, disorders arising within the muscle itself, would include the various muscular dystrophies and atrophies—neurologically characterized by the absence of neurological findings other than fasciculation, weakness and atrophy present in the involved muscles, and absence of reflexes if the muscles are quite badly damaged by the disease process. Atrophy of disuse, as after prolonged immobilization by cast or bracing would fall in this group.

The second group, disorders of peripheral nerve supply, is characterized by a variable degree of weakness and atrophy of those intrinsic muscles supplied by the involved nerve — broadly the interossei and lumbricales of the medial fingers if the ulnar nerve is disordered, or the muscles of the thumb and lateral lumbricales if the median innervation is disturbed. To clinch this differentiation one can rely on the fact that each has a characteristic sensory pattern which may be outlined. With peripheral nerve lesions the sensory loss may be complete or very slight, in accord with the degree of nerve interruption; but whether the findings be complete anesthesia and analgesia or so slight a hypalgesia that it is rather difficult to outline, the pattern is constant and reliable.

The median nerve provides sensation on the palmar aspect of the thumb, index, middle and radial one-half of the ring finger in addition to the corresponding portion of the palm of the hand. While this pattern is characteristic, readily recognized and hardly to be confused with the sensory pattern of any other neurologic disturbance, sensory impairment of ulnar nerve origin is easily confused with the sensory findings of eighth cervical nerve root or brachial plexus involvement. It is with the finer differentiations of these three sensory patterns that we shall be largely concerned in the balance of this discussion, since each has a characteristic outline and since lesions at each level can be reliably defined by the sensory findings.

The pattern of peripheral ulnar nerve sensory impairment includes analgesia or major hypalgesia in the fifth digit and ulnar one-half of the fourth, on both ventral and dorsal aspects, together with similar degree of sensory loss on the adjoining dorsal and volar surface of the hand. In addition there is a lesser degree of sensory impairment that can be outlined by light pin scratch which includes the remainder of the fourth digit, all of the third digit and the corresponding portions of palm and back of the hand. This "overlap" area extends well up on the ulnar border of the forearm, nearly to the elbow, but no sensory changes can be demonstrated at a higher level.

Lesions productive of such median or ulnar nerve paralysis or paresis, often called "neuritis," include penetrating wounds, involvement of nerve in fractures, tumors arising within or adjacent to the nerve or compression of the nerve by callus or scar tissue, such as is seen in the familiar tardy-ulnar palsy arising through compression of the nerve at the ulnar groove of the humerus. The median nerve is sometimes involved in compression beneath the transverse carpal ligament, especially after fracture of the distal portion of the radius. This nerve may also suffer compression as it passes under the upper margin of the flexor digitorum sublimis, the so-called sublimis "bridge." Since both these syndromes can result in similar atrophy of the thenar muscles and sensory impairment of median nerve distribution, the differential diagnosis rests on demonstration of a Tinel's sign at the point of compression or the production of an electric-shock sensation on sudden extension of the wrist in the carpal ligament syndrome or on supination in the sublimis bridge syndrome. Treatment consists in surgical relief of the compression.

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*Read before the Omaha Mid-West Clinical Society, October 31, 1951.

The third category, involving compression or destruction of the lower trunk of the brachial plexus, composed of the united eighth cervical and first thoracic nerve roots, frequently combines weakness and atrophy of the intrinsic muscles of the hand with sensory changes in what is erroneously referred to by many as the "ulnar distribution." Careful study of the case uncovers aching pain along the inner or ulnar side of the arm and forearm with tenderness over the scalene insertion. Frequently, but not always, the radial pulse is obliterated by holding the arm above the head, or by other maneuvers. Most reliable is the sensory pattern which we refer to as the scalene dermatome. This constitutes a pattern of hypalgesia covering the primary cutaneous distribution of the lower trunk of the brachial plexus. This includes the anterior primary divisions of the eighth cervical and first thoracic nerve roots. Since the posterior primary divisions of the nerve roots separate and curve posteriorly around the vertebra before the nerve trunk passes beneath the scalenus muscle and over the first rib, these nerve bundles escape compression. For this reason the area of hypalgesia does not reach clear to the midline posteriorly. Further, since the first thoracic nerve root is involved there can be anterior chest pain and there is a demonstrable band of hypalgesia following anteriorly around the first rib. In the hand the hypalgesia involves all of the ring and little fingers.

Lesions responsible for such a syndrome include the so-called scalenus anticus or cervical rib syndrome, amenable to surgical section of the scalenus anticus muscle; and superior sulcus tumor (Pancoast tumor), in which there is usually the additional finding of a Horner's syndrome due to cervical sympathetic paralysis. Two other syndromes which might be expected to produce similar findings are costo-clavicular compression (pinching the lower trunk or its derivative medial cord of the plexus between clavicle and first rib) and sub-coracoid pectoralis compression beneath the coracoid process of the scapula. There are differentiating tests for both of these, but the author has yet to recognize his first definite case of either of these syndromes.

The fourth group, lesions involving the nerve roots, is composed largely of cases of herniation of the intervertebral disc between seventh cervical and first thoracic vertebrae with compression of the eighth cervical nerve root. Weakness and atrophy of the intrinsic musculature of the hand is not as pronounced as in lesions of the peripheral ulnar nerve or lower trunk of the plexus, but some degree of both is seen. The subjective numbness is still of the erroneously called "ulnar distribution," but involves all of the fourth and fifth digits. Study of the case reveals the complaint of pain medial to the spine of the scapula, aggravation by neck movements, by coughing straining or sneezing and by downward compression on the vertex of the head. The finding of hypalgesia in the dermatome of the eighth cervical nerve root is confirming evidence. Here the sensory impairment reaches to the midline posteriorly and does not include the first thoracic nerve root distribution. Rather rarely tumors (usually neurofibromas) may produce almost identical complaints and findings.

The fifth and last group, lesions of the spinal cord, producing atrophy in the hand muscles, requires that the lesion involve the anterior horn cells, or motor root fibers at the lower cervical and upper thoracic levels. Such lesions include fracture dislocation of the cervical spine, poliomyelitis, syringomyelia, multiple sclerosis, lateral sclerosis, other less common degenerative lesions and tumors either intra- or extramedullary in location. The essential factors in differentiating these from nerve root lesions are the presence of symptoms and signs arising from interference in the function of the ascending and descending fiber tracts within the spinal cord.

In summary, a brief attempt has been made to demonstrate that the location of the lesion producing weakness and atrophy in the intrinsic musculature of the hand in any given case can be anatomically delineated by careful examination of the patient, with particular care in sensory examination by means of light pin scratch. It appears obvious that a careful, general neurological examination must be done and that x-rays appropriate to the case under study will be taken and studied. With the anatomic diagnosis made, the pathologic diagnosis may be obvious or may require surgical exploration. Half the battle is won when the doctor knows where he is to direct his therapy.

Presidential Address*

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To me the President's Address should bring to our attention some of our more important problems, and should point a way for the future. Naturally and properly my remarks will be influenced by conditions in my own state, Nebraska. In our deliberations we should be constantly mindful of our strengths and our weaknesses, of our successes and our failures. We should strive to understand our ever changing environment which sustains and modifies us. We are a small but very important part of a great social structure. This structure is becoming more and more interwoven. One nation can no longer live by and for itself alone. We physicians as individuals or groups can no longer live by and for ourselves alone. Possibly for some, liberty will need to be more rigidly defined.

Our profession can profit much by realizing the problems, needs, and desires of our people. We should constantly adjust ourselves so as to bring to our people the greatest possible good from the medical heritage which we hold. For the most part our problems are somewhat different from many other areas. Our people are largely farmers or live in small communities. Often they have little or weak organization. In this country we represent rugged individualism. We are firm believers in democracy, but a democracy has a great weakness. Above the door of our State Capitol are inscribed the words, "The salvation of the state is watchfulness in the citizen." Do we as individuals of the medical profession have enough of this virtue of watchfulness?

Medical education tends to groove us to think only of the cure of the sick. If we do not broaden our thinking the groove will lead to a rut of medical isolation. There is danger in getting out of a rut. If you go too slowly you don't get out, if you go too fast you go into the ditch.

Always our great problem will be that of our relationship to the public. There is a constant flow of individuals and organizations who seek to do good through our profession. We seem to have a natural desire to discourage them unless we have a particular interest in their particular problems. They should not be discouraged. They should be encouraged and guided. Many questions cannot be answered by the profession alone. The laymen need to be educated as to our problems. We need their coperation and we need their funds and votes in order to take up the slack between what we now do and what we could do. We need to know more about well people and what well people think. We need to tell well people about ourselves and tell them in plain English. A sick person likes his own doctor, but well people think doctors a bit peculiar and aloof, probably scientific and scholarly, but unable to manage anything except illness; and, well people make the laws.

A few days ago our people spoke in a clear and decisive manner. At this time they want none of state medicine. But this is no final victory, to quote General Eisenhower, "it is trite to say that this is a day of dedication rather than of triumph."

Our profession now has its great opportunity to take leadership in providing for medical care. Our people and the new administration will expect us to accept this responsibility. We will be expected to:

1. Continue to provide good medical care.
2. Provide this care to all our people.
3. Provide this care at a fair cost.
4. Provide a means whereby our great middle class can pay for this care without an undue burden, especially at the time of illness.
5. Provide means whereby indigents and medical indigents may receive this care in an efficient manner at government expense and without waste.

We should promptly accept this challenge.

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*Delivered before the North Central Conference, Minneapolis, Minn., Nov. 16, 1952.

The basis of good medical care is good medical schools. Certainly our schools are doing an ever better job of teaching our students. To a large extent our medical societies are not closely related to our medical schools. In Nebraska we are much interested in off-campus teaching. This type of teaching, while having objectionable features, does serve to bring many practitioners into close relationship with students and provide teaching beds at a considerable saving to the public.

One of our most difficult problems is to provide for certain isolated groups of people. Modern transportation has taken care of this problem to a large extent. In Nebraska this problem has led to the establishment of a location bureau. This bureau, established by our executive secretary, Mr. M. C. Smith, has proved to be as efficient as it is simple. Communities requesting a physician fill out an information blank. A physician seeking location is provided with copies of all these blanks on file and all communities are notified of this physician and his qualifications. The rest is left to the community and the physician. This program, since 1945, has located 468 physicians. Over half of these have gone to rural areas where less than half of our people live.

Prepaid medical care plans have proved themselves. They are our big answer as a method whereby the largest section of our people can afford to pay reasonable prices for care during illness. These plans must be further extended. Our arrangement with Blue Shield relative to phyicians accepting the Blue Shield fee as payment in full for the lower income groups, should be extended to other companies. Every encouragement should be given to all good companies in this field in the effort to make their plans cover a larger field of services.

We must have reasonable fees for our services. There must be a fair relationhip between the fees for various services. Several years ago I reported to this conference the fee schedule for governmental agencies as prepared by the Nebraska State Medical Association. This schedule has been used in Nebraska for six years. It has been used in old-age assistance, Workmen's Compensation Court, care of the blind, National Foundation for Infantile Paralysis, vocational rehabilitation and others. I can now further report that in Nebraska this effort has been a distinct success. During these years not a single objection has come to our attention from doctors, governmental agencies, or carriers for workmen's compensation.

The most damaging phase of our conduct is the occasional excessive fee. In Nebraska the question of surgical fees constitutes the bulk of patients' complaints coming to our Council on Professional Ethics. The answer to this question is difficult. Possibly our fee schedule should be made more public, and our doctors requested to abide by it except in an occasional unusual case.

In our state old-age assistance provides an excellent opportunity to learn about health costs. We have 25,000 recipients who are provided with unlimited health costs. Doctors are paid according to our medical association fee schedule and hospital and drug costs are at regular rates. Patients have free choice of physicians, hospitals and pharmacies. During the year 1950-51, the doctor bill, drug bill and hospital bill were about equal at one-tenth of the total each, with nursing homes taking six-tenths. In response to public criticism of so-called medical costs, our Board of Control, which administers old-age assistance, publicly replied that health costs must not be confused with medical costs and that in reality, actual physician cost at one-tenth of the health program is a very small portion. To me this is important information, in a significant group of people, with accurate cost figures that the doctor, drug, and hospital bills are equal. We must be mindful of all health costs as well as our own fees.

If we are to truly accept the problem of medical care for our people we must in some states, including Nebraska, be more mindful of public health. Only a small part of what could be done is being done. The trouble with preventive medicine is that the person who is prevented from becoming ill does not know about it and does not want to pay for something that he does not know about. Here we must provide leadership to the end that the public will understand and insist on having the measures instituted which will prevent their illnesses. Nothing that we can do will bring as much respect and confidence as to show a greater interest in public health and preventive medicine.

It seems to me that in this new era many activities can best be carried on at state or more local levels. Such activities as self disciplinary fee schedules, relationship with the press, school systems and other professional groups, are state or local problems. In our states and local communities we can deal with people as individuals. What happens in Washington will simply be a reflection of what these individuals think. We can run interference and block in Washington, but let us tackle the home folks. They have the ball.

Stenosis of the Esophagus Due to Ingestion of Corrosives*

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Corrosive esophagitis with its resulting esophogeal stenosis is only one of the several preventable chronic illnesses that can be reduced significantly in incidence with a minimum of effort on the part of all who are instrumental in the care of the well child.

The incidence of such diseases as smallpox, diphtheria, tetanus, and typhoid fever, has been remarkably reduced; however, the incidence of one glaring disease, the most common cause of death in children, and the most easily preventable of all diseases remains relatively unchanged in the past ten years. This disease is represented by accidents.

All who are interested in well child care will go to great lengths to extol the virtues of basic immunizations, proper diet, and prophylactic care in such illnesses as chronic nephritis, rheumatic fever, and others. These measures have proved their value today without question. However, the importance of prophylaxis in this one most easily preventable, yet most common of all diseases, has somehow been overlooked.

The following figures, 1 and 2, (taken from Children's Bureau Statistical Series, No. 6, Federal Security Agency, Children's Bureau, Washington 25, D. C.) illustrate the relative positions that accidents play as a cause of death in children of the indicated ages. It should be emphasized that these figures represent only death from accidents. It is estimated that for every accidental death among children, there occur six accidents serious enough to require hospitalization, and that for every accident necessitating hospitalization there are, of course, many, many more which also could have easily been prevented.

A few words of advice to the receptive mother of the curious, careless child will do more to reduce the mortality in these ages than a dissertation on the virtues of such an important procedure as immunization.

The accident we have elected to present, corrosive esophagitis, fortunately is not a common problem in the Northern States; however, it is encountered in sufficient frequency to warrant a review of the recent concepts of therapy.

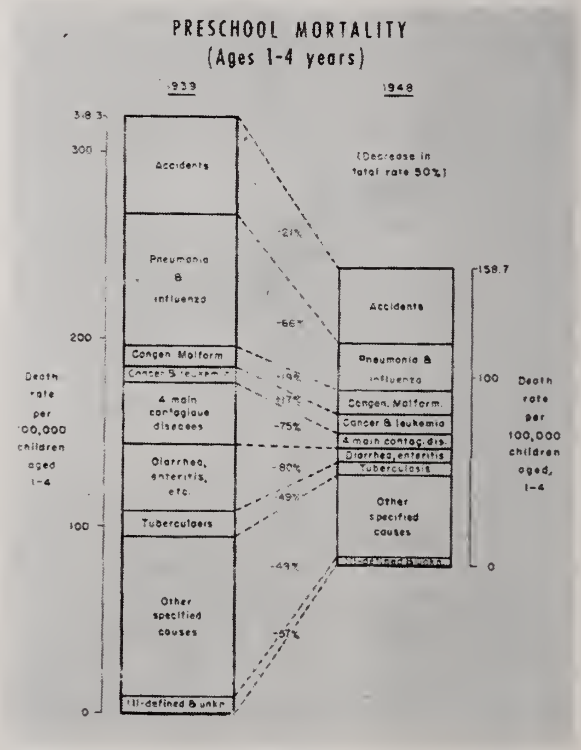

Figure 1

The mortality in this condition, though high, is not excessive; the morbidity, on the other hand, in inadequately treated cases, is alarming. It is primarily for this latter reason that the subject is now reviewed.

Corrosive esophagitis is a common, every day problem in many of the Southern States; for obvious reasons it is seen primarily in small children in the one to three age range. However, a few cases of accidental ingestion, or ingestion with suicidal intent are seen in adults.

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*Read before Annual Convention Nebraska State Medical Association, May 13, 1952.

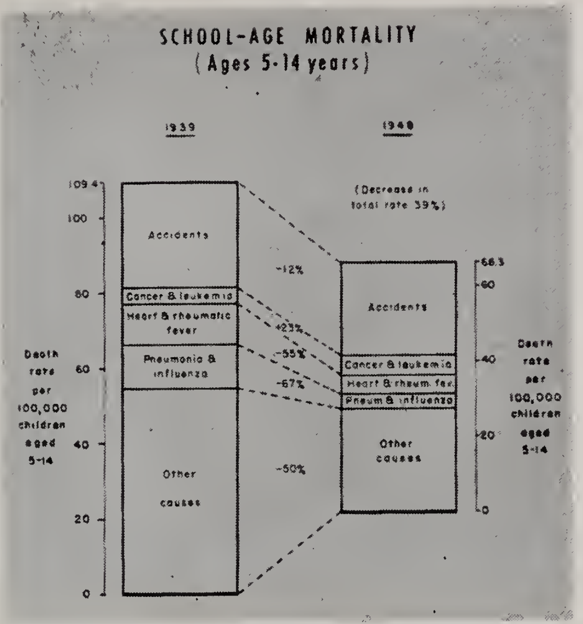

Figure 2

The following photograph (Fig. 3) shows the types of corrosive agents most frequently encountered. All are alkalis readily obtained from the local grocer and are to be found in most households.

The extent of the pathological changes in the esophagus depend upon the concentration, dose, and type of caustic taken. Acids though infrequently the cause, produce a more severe burn than do most alkalis. Furthermore, acids more frequently also produce burns of the stomach. This is unusual with the alkalis which presumably are somewhat neutralized by the gastric hydrochloric acid. However, burns of the pylorus have been reported.

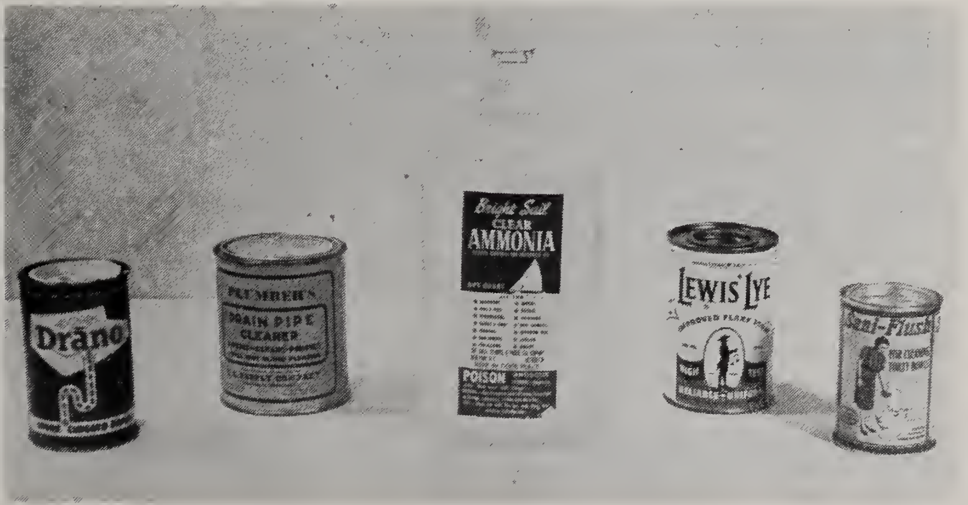

Figure 3

Three distinct symptom periods can be directly correlated with three rather distinct pathological changes occurring in the usual case classified as a second degree burn.

The immediate symptom is pain. A few hours later, obstruction occurs due to edema, and inflamation of the oral cavity and esophagus. The patient usually is not even able to swallow his own saliva. These early symptoms disappear over a period of the first week, usually within two or three days.

The second period is one in which the symptoms are either mild or non-existant. This latent period is one of healing by granulation of the ulcerated areas. It begins within the first week after ingestion of the caustic and lasts for approximately two to four weeks after which the third stage insidiously makes its appearance.

The third period is one of fibrous tissue replacement which, over a period of a few days or weeks, produces progressive dysphagia. If untreated this ultimately results in complete obstruction due to fibrous scar formation.

Strictures, though usually single, may be multiple and tend to occur in the upper two-thirds of the esophagus at points of normal anatomical narrowing.

Special diagnostic procedures are essentially those of esophagoscopy and x-ray examination with a barium swallow. During the first month after the burn, esophagoscopy is a hazardous procedure. Diagnosis in the vast majority of cases can easily be made without these special procedures. One should assume that the esophagus is involved if there is any evidence, no matter how slight, of burns about the oral cavity.

Treatment is extremely tedious, time consuming, and many times periodically disappointing. Therapeutic measures can be divided into four phases depending upon the stage of the burn.

If one is fortunate enough to see the patient immediately after the burn has occurred, the following is recommended: The patient should take some type of weak acid, —vinegar or some fruit juices are usually at hand. If several hours have elapsed these agents will be of little or no value in limiting the extent of the burn. Gastric lavage should not be done unless, as is rarely the situation, the corrosive agent is one of the acids such as sulfuric, carbolic or hydrochloric in which case lavage with a weak alkaline solution may be helpful in preventing burns of the stomach. Supportive care with frequent applications of soothing oils such as olive oil, a teaspoon every hour or so, will do much to relieve the patient.

During the first two or three days, food and fluids must be given parenterally. When the initial edema of the mouth and pharynx have subsided, which is usually by the fourth or fifth day, dilatations should be started with soft rubber mercury or shot filled bougies, passing indirectly two or three bougies daily, starting with a size 20F, and increasing the size progressively each day until the maximum sized bougie can be passed with ease. In the case of the two or three year old child this is usually a 40F. The largest bougie passed in any day should be kept in the esophagus for about thirty minutes before withdrawal.

Dilatations should be continued daily for at least the first two weeks, then every second day for the next month, every third day for the third month, and so on until at the end of a year dilatations are being done once or twice monthly. During the second year, the frequency of dilatations with these rubber bougies will depend upon the progress of the patient. If this is satisfactory, only three or four dilatations are necessary. This procedure should be continued for the ensuing two years. If regression occurs at any time, a more vigorous schedule must be resumed. This method of dilatation requires no anesthesia.

Treatment during the latent phase after the edema has cleared and the patient feels well and is eating well, which usually occurs between one and four weeks after the initial burn, should be essentially the same as in the first stage just mentioned. It may be difficult to convince the parents that this apparently traumatic procedure of dilatations be instituted when their child appears to have completely recovered. However, this is the danger period and treatment must be started without delay.

Some cases at three or four weeks after the burn are seen with a complete obstruction. In this early period, complete obstruction is due in part to edema and not entirely to contracting scar formation. Withholding food and fluids for one or two days is usually sufficient to relieve the edema and make dilatations possible. A soft diet can then be resumed.

The greatest problem occurs in the child who has not been treated or who has been inadequately treated in spite of progressive stenosis. If these children are malnourished as is usually the case, gastrostomy as a means of feeding and retrograde bouginage should be done. Retrograde bouginage, which is probably the safest and most effective method of dilating, should be done every second day. Progress is slow due to the dense, contracted fibrous tissue, but with persistence over a period of several months or a year, it is possible to achieve very satisfactory results. When a 30 to 34 F. retrograde bougie can be passed, it becomes possible to close the gastrostomy and continue with the mercury filled bougies.

With this same problem of advanced stenosis, other forms of therapy can be attempted. One is direct dilatation through an esophagoscope. This requires anesthesia, an endoscopist, and two or three assistants several times weekly. It is a hazardous procedure, particularly in cases where multiple strictures are involved. Another method entails the passing of rigid dilators, guided by a string which has been previously swallowed. This is a blind procedure; it is time consuming; it requires considerable restraint of the patient; and it, too, is not without danger. Surgical reconstruction, rarely necessary, is reserved for those patients who have complete and extensive stenosis. The end result, even though considered successful, cannot duplicate that of persistent conservative management.

For illustration, let me review one of our cases under treatment at the present time.

The child, 2½ years of age at the time of admission to the University Hospital on February 10, 1950, had taken, according to the mother, two or three teaspoons of lye water, twenty-one days before admission. The local doctor prescribed the immediate therapy; however, the mother did not seek medical aid again until three weeks later when she became concerned about the patient's progressive dysphagia. This patient has been in the hospital almost continuously since the time of admission. His course was as follows:

Gastrostomy on admission.

Perforation of the esophagus during dilatations through an esophagoscope; this resulted in mediastinitis, an esophago-pleural fistula, and empyema, requiring thoracotomy.

During his four months of recuperation he developed a stenosis so extensive as to require surgical reconstruction. A portion of jejunum was anastomosed substernally to the proximal undamaged esophagus and to the stomach.

His post-operative course was complicated by massive atalectasis and an esophago-pleural fistula. This resulted in empyema requiring another thorocotomy and necesitated interruption of the gastrojejunostomy, both openings, jejunum and stomach, being exteriorized on the abdomen.

A stricture developed later at the esophago-jejunal anastomosis in the superior mediastinum requiring resection and reanastomosis.

Since that time he has developed a second stricture at this same site which is now being dilated. His jejunum and stomach have been reanastomosed.

His surgery was completed last week and now, for the first time in two years, he can eat normally.

He is now 4½ years of age and has spent almost one half of his life in the hospital. During this time he has had seventeen esophagoscopies, fifty-six x-rays and innumerable dilatations, all the result of two or three teaspoons of lye water.

In conclusion let me reiterate:

1. If corrosive agents must be used in the home, place them in an inaccessible place, preferably under lock and key.
2. Early indirect bouginage three to five days after the burn is essential for good results.
3. Do not consider the child well during the asymptomatic latent period occurring in the second to the fourth week after the burn.
4. Early esophagoscopy and bouginage with rigid dilators is impractical in most cases and not without danger of perforation.
5. Retrograde dilatations through a gastrostomy is the treatment of choice in relatively advanced stenosis.
6. Surgical reconstruction is rarely necessary and never completely satisfactory.

Problems Relating to the Recognition of Hydronephrosis In Everyday Medical Practice*

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Hydronephrosis is a condition occasioned by obstruction in the urinary passages, which is characterized by an accumulation of urine distending the pelvis of the kidney and causing atrophy of the renal parenchyma.

When the obstruction occurs abruptly and the flow of urine is completely blocked, there is sudden and intense pain in the kidney which will continue until flow of urine is reestablished down the ureter. An example of this situation is to be found in renal colic due to calculus obstruction. If a ureteral catheter is introduced and passes the stone, allowing some urine to be withdrawn from the distended pelvis, the intense pain is immediately relieved.

Another familiar example of acute ureteral obstruction is that which occurs in the syndrome that is known to all of us as intermittent hydronephrosis. This condition occurs when the upper ureter is compressed by an anomalous blood vessel or an abnormally placed band of fascia. The anomalous blood vessel or the misplaced facial band may not by itself create the total obstruction of the ureter; that is generally induced by displacement of a movable kidney which causes the ureter to be kinked where the vessl or fascia crosses it. Patients who suffer from intermittent hydronephrosis often are aware that certain activities will precipitate an attack of pain. Some are induced by riding in a motor car or from stepping or jumping down from one level to another. Your essayist once saw a girl who suffered from the condition in question. When asked if she knew of any particular activity that caused her attacks the child promptly replied: "I only have the pain when I jump down from the hay wagon." She was then asked an obvious question: Why she ever jumped down from the hay wagon if that caused her so much suffering. Her answer was that the family had no other conveyance. Sometimes the attacks of intermittent hydronephrosis can be terminated as well as induced by changes in posture. Occasionally a patient will discover that the attack can be relieved by lying down with the head level below the level of the hips; or perhaps rolling from one side to the other while lying down will release the obstruction.

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*Read before Annual Convention State Medical Association, May 14, 1952.

Hydronephrosis of this type, causing acute attacks of pain in the kidney, is ordinarily recognized by the physician because of the nature of the symptoms; and, when suspected, the condition is generally easy to diagnose by pyelography. If a stone is responsible for the obstruction, it will usually be demonstrated by the roentgenogram; if angulation of the ureter is the cause, this too will often be indicated by the pyelograms. Furthermore, the majority of cases will demonstrate some degree of persisting hydronephrosis after the attack has subsided, easily recognized by pyelography. The latter condition, of course, will depend upon a persisting incomplete obstruction in the ureter.

There is, however, a considerable group of these cases in which attacks of obstruction occur occasionally, but when the patient is free from pain there is no persisting impingment upon the ureter and no interval hydronephrosis that can be demonstrated by pyelography. One might liken the findings in such a case to those observed in patients who suffer the frequent passing of small renal calculi: Such a patient is apt to show no abnormality whatever by pyelography shortly after passing a stone, even though obstruction of the ureter indicated by severe colic has recently occurred. It is this type of intermittent hydronephrosis that offers a knotty problem of diagnosis to the clinician, and I wish to dwell for a while upon its clinical recognition; for the diagnosis in such cases, even though suspected, may be very difficult to prove. The attacks usually come on suddenly and may last a few minutes or several hours, and nausea and vomiting frequently accompany the pain. Then, when the attack subsides, there is residual soreness in the flank. The clinical disturbance created by this condition is so severe that even when its true nature is suspected by the physician, pyelograms are usually not made during the attack; yet only if pyelograms are made at such a time can the diagnosis be established with certainty. If the physician sees the patient during an attack, his immediate concern is to relieve the patient of his agony. Moreover, the suffering patient is in no mood at the moment to welcome an emergency trip to an x-ray laboratory, which is apt to be busily occupied with a throng of regularly scheduled patients. Furthermore, the routine of most roentgen laboratories demand that a patient have what is considered to be "adequate preparation," i.e., purgation and dehydration overnight, before pyelography.

So the patient who has suffered from an attack of this type usually has a delay in getting pyelograms made, even when ordered. And when the physician finally gets a report from the roentgenologists saying that the pyelograms are normal, he is at a loss for a diagnosis. Furthermore, if he has previously seen the patient during an attack and feels at all certain of the diagnosis, he is apt to have a sense of incredulity or frustration when he gets the negative report. Of course, all patients with the characteristic symptoms herein described will not in the end be found to be suffering from intermittent hydronephrosis. There are many instances in which the cause for intermittent back or flank pain offers a difficult problem of differential diagnosis, often bringing in the services of the cardiologist, the neurologist, the orthopedic surgeon and even the psychiatrist, as well as the gynecologist and the urologist. But the able diagnostican must not exclude the diagnosis of intermittent hydronephrosis on the basis of negative pyelograms unless they have been made while the patient is actually suffering in an episode of pain.

The following typical cases are illustrative of the situation undei discussion:

A 44 year old woman complained of intermittent left costovertebral angle pain occurring weekly over a period of three years. Physical examination revealed left costovertebral tenderness in an undernourished woman. Blood and urine studies were negative. Pyelograms made during an interval between attacks were essentially negative. Repeat pyelograms made one week later during an attack of pain showed a grade 2 hydronephrosis on the left.

The next case was a 44 year old laborer whose chief complaint was intermittent left costovertebral angle pain of one and one-half year's duration. Physical examination was negative. Blood and urine studies were also negative and intravenous pyelograms made during his visit to the clinic while free from pain were normal, yet the nature of his pain was such that it was thought to be typical of Dietl's crisis. He was advised to have excretory pyelograms made during an attack of pain. He returned 5 months later bringing with him a set of urograms taken by his local physician during an attack. These showed non-visualization of the left kidney and appeared to provide unmistakable evidence of acute ureteral obstruction. Intravenous pyelograms were repeated at the University Hospital while he was free from pain and these were negative.

Exploration of the left kidney revealed the presence of an aberrant vessel crossing the ureter. This was cut between ligatures and a plastic operation at the ureteropelvic junction was performed. The patient has suffered no further attacks of pain.

Another case demonstrates the value not only of making pyelograms during an episode of pain, but also the importance of placing the patient in the proper position for pyelography if position is related to the pain.

A physician's wife, age 32, suffered from dull and aching pain in the right upper quadrant and right flank when lying in bed—particularly when on her back or the left side. This pain did not occur every night but came on several nights each week and often disturbed her sleep. It was relieved by assuming an upright position, either sitting or standing. The pain never came on while she was up and about and did not interfere with her household activities. All manner of examinations were negative, including excretory pyelograms, which showed only the presence of duplication of the right ureter and renal pelvis but no uropathy. We saw her in consultation and suggested that excretory pyelograms be made during an episode of pain. She was asked to lie on her back upon a stretcher in the x-ray department until she felt the typical pain that she was familiar with. She was then lifted to the x-ray table and excretory pyelograms were made while she was suffering discomfort. These urograms revealed unmistakable evidence of ureteral obstruction with moderate hydronephrosis, which immediately disappeared when she was placed in the upright position.

Another group of cases seem to emphasize the necessity of making pyelograms while the patient is suffering discomfort; likewise the need for reproducing the condition that appears to bring on an attack.

A young man reported that he suffered attacks of severe pain in the region of the kidney whenever he spent an evening drinking large quantities of beer. He never had any discomfort at other times. Asked whether a large intake of other fluids would also bring on the pain, he replied he'd never conducted such a test. Two sets of pyelograms were made: One when he was comfortable, the other after he had consumed two quarts of water and was suffering intensely from discomfort over the kidneys. The latter showed unmistakable evidence of hydronephrosis.

Numerous cases of this kind have been encountered and it is evident that ordinary amounts of urine can be carried down the ureter in these cases without damming up the pelvis; but when there is an overload in the amount of urine, minor interference in conduction can sometimes result in temporary obstruction. Cases of this sort can be handled in two ways: By avoiding excessive fluid intake, or by operative removal of the factor responsible for the obstruction.

From our discussion, it is evident that in cases such as these the diagnosis can be established only when urograms are made during an acute attack of pain. But there are many conditions other than hydronephrosis in which symptoms of this same type can occur. In these cases the pyelogram made during an attack will exclude the kidney as the site of pain. Such cases are sometimes diagnosed ureteral stricture by uninformed physicians or urologists, and treated by ureteral dilations. The fallacy of that diagnosis is evident when one realizes that ureteral spasm or organic stricture always produces dilation above it and can invariably be demonstrated by pyelography. When genuine stricture of the ureter is present the excretory programs will always reveal unmistakable dilation above the site.

In patients with this sort of pain who have no pyelographic evidence of obstruction, additional studies, sometimes exhaustive in scope have eventually disclosed the presence of one of the following conditions: spinal cord tumor, major hysteria, diverticulosis of the colon, coronary disease, cholelithiasis, protrusion of the intervertebral disc, as well as other common lesions. In either situation, it is evident that a urogram made during pain is an essential feature of the diagnostic study of the patient.

Thus far, we have dwelt upon situations in which obstruction impinges upon the ureter for a brief episode, then clears completely, leaving no imprint to the normal condition of urine after the attack. Let us address our attention to another facet of obstructive uropathy which presents problems of a different nature and likewise are often quite difficult of diagnosis. The condition in question is one that results from an incomplete yet continuous obstruction of the ureter. This sort of obstruction will cause massive degrees of hydronephrosis because it is progressive in its development. The pelvis of the kidney will become excessively dilated and lose all resiliency of its muscular coats, while the parenchyma of the kidney may undergo advanced hydronephrotic atrophy. Yet if the flow of urine is never interrupted completely, there may not occur any episodes of pain or any discomfort in the region of the kidney.

Patients who develop a silent hydronephrosis of this sort indeed may go through life without ever suffering any localizing symptoms to focus attention on the true nature of their lesion. Instead they may have disturbances that are subjective in nature that are referred only to the gastrointestinal tract. We are all familiar that acute renal colic often is accomplished by nausea and vomiting—reflex gastrointestinal symptoms of an acute type. The reflex symptoms which arise from massive but silent hydronephrosis are of lesser intensity but usually are referred to the gastrointestinal tract. They often simulate the symptoms of duodenal ulcer. In fact, we have encountered several such cases that had typical ulcer symptoms, with dyspepsia relieved by alkalis or the ingestion of food; yet the roentgen examination of the stomach failed in each case to demonstrate evidence of a duodenal lesion.

A typical case of this type is exemplified by a 40 year old physician who had suffered since his medical school days with dyspepsia that usually came on with hunger and was relieved by taking alkalis, milk or food. Gastrointestinal x-ray studies showed no lesion in the stomach or duodenum. While swimming he had a sudden attack of right flank pain which persisted for several hours and was relieved by nausea and vomiting. X-rays of the gallbladder were made and these were inconclusive. After he had suffered from several attacks it became evident that the gastrointestinal tract was not causing the trouble and excretory pyelograms were made. These studies revealed a large right hydronephrosis. An operation was performed and the upper ureter was found to be partially compressed by an aberrant vessel which crossed it where the ureter entered the renal pelvis. The obstruction was relieved by appropriate surgical measures and the patient has suffered no further attacks of pain; furthermore, he has been entirely free from dyspepsia.

Cases of this type are familiar to the urologist but the internist does not often encounter them so is usually not alerted to their recognition. He will be well advised to investigate the kidneys by pyelography in all young persons complaining of typical ulcer symptoms when the gastrointestinal roentgen study fails to disclose the presence of a gastric or duodenal ulcer.

CONCLUSIONS

Hydronephrosis has many causes, as well as a great variety of clinical manifestations. Some of these, like the gastrointestinal symptoms that often accompany massive hydronephrosis, tend to be misleading to the clinician and constitute a pitfall in diagnosis. The clinician will be well advised to investigate the kidneys by pyelography in all young individuals who complain of dyspepsia yet have negative G.I. x-rays. Some will be found to suffer from hydronephrosis.

Another pitfall in diagnosis is encountered in the patient with intermittent hydronephrosis whose pyelograms made between attacks are normal. In these patients the diagnosis can be established only on the basis of urograms that are made during an attack of pain likewise the diagnosis of hydronephrosis in many cases having flank pain can be excluded by this means alone.

MECHANICAL HEART MECHANISM MAINTAINS BLOOD SUPPLY IN MAN

One of the first instances of survival of a patient on whom a mechanical heart mechanism was used to take over the complete function of maintaining the blood supply of the body while the heart was opened and worked on was reported in the current (October 18) Journal of the American Medical Association.

Complete substitution of the left ventricle of the heart (the lower left cavity of the heart) by an artificial pumping mechanism was maintained for 50 minutes, according to Drs. Forest D. Dodrill, Edward Hill and Robert A. Gerisch, of the research division of Harper Hospital, Detroit. The patient, a 41-year-old man, was undergoing an exploratory heart operation.

The doctors stated that they had found, through animal experimentation, that substituting the flow of blood on the left side of the heart is safer and simpler than bypassing the right side, the entire heart, or the entire heart and lungs.

The complete bypass of the left ventricle of all the blood that normally passes through it may permit surgery on the heart that has not before been possible, the doctors pointed out. These possibilities include the removal of foreign bodies from the wall of the heart without danger of hemorrhage; such pathological processes as aneurysms of the left ventricle (localized bulging of the left ventricle heart wall), severely infarcted areas (dead tissue due to loss of blood supply), and tumors involving the heart wall could be resected while the systemic circulation is maintained; and pathological conditions of both the mitral and aortic valves may be made more amenable to surgical procedures.

DOCTOR, PLEASE TAKE EACH COPY OF YOUR JOURNAL HOME. THE WIVES COMPLAIN THAT THEY NEVER GET TO READ THE AUXILIARY COLUMN.

Reconstruction After Traumatic Deformity of the Ear

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The author presents two cases of traumatic deformity of an ear. He describes the technique used in operative correction of the condition and illustrates, photographically, the appearance before and after surgical correction.
EDITOR

The reconstruction of a cosmetically acceptable external ear is, in a large measure, determined by the presence or absence of remnants of the original organ. In congenital absence of the ear, where such remnants are either absent or insignificant, the end result of reconstructive operations is seldom acceptable from the cosmetic point of view. Ears mutilated or lost as a result of trauma are seldom completely destroyed. There is usually enough normal tissue left to permit operative procedures to be done with a good expectation of achieving a satisfactory cosmetic result. Probably the most difficult part of the ear to reconstruct is the lobule. Fortunately this is the part least susceptible to trauma, and its survival is largely responsible for the good results of post-traumatic reconstruction.

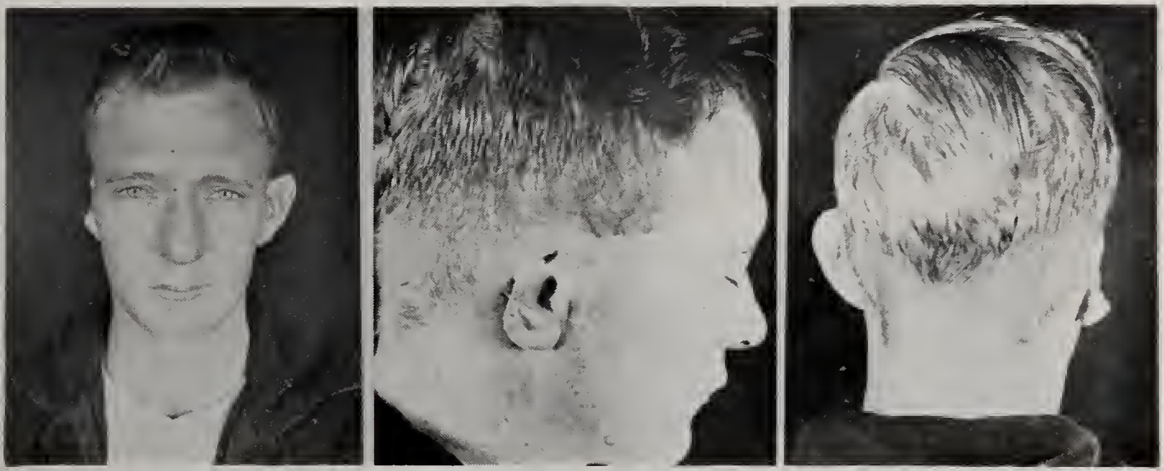

FIG. 1, a — Appearance of patient after traumatic amputation of most of right ear,

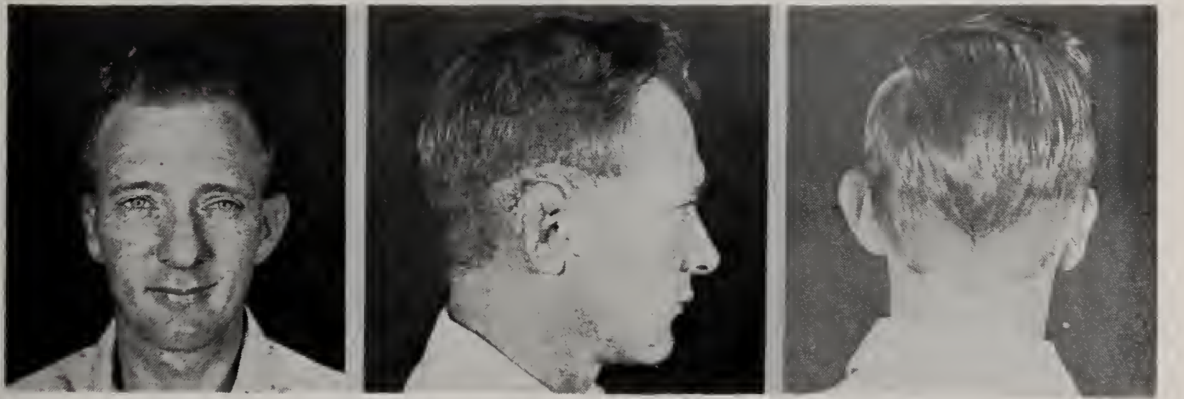

FIG. 1, b — Appearance of following elevation of postauricular flap. The edges of the skin graft covering the raw donor area are clearly visible. A relatively normal appearance is achieved.

Two cases are reported as illustrating the possibilities of post-traumatic reconstructive otoplasty. The requirements in each case were different, but the end results in both were quite acceptable.

Case No. 1 — A young man lost the major portion of his right ear as a result of an automobile accident. Because the lobule had been spared it was felt that a good cosmetic result could be

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Sponsored by the Veterans Administration and published with the approval of the Chief Medical Director. The Statements and conclusions published by the author are a result of his own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

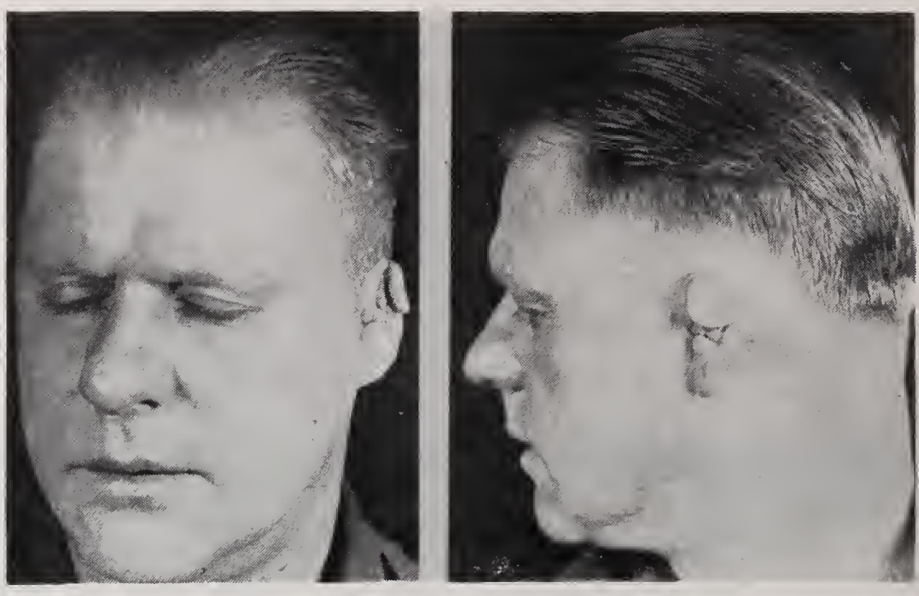

FIG. 2, a — Contraction of auricle and collapse due to contraction of supporting cartilage. The patient was most disturbed because of the falling over of the helix.

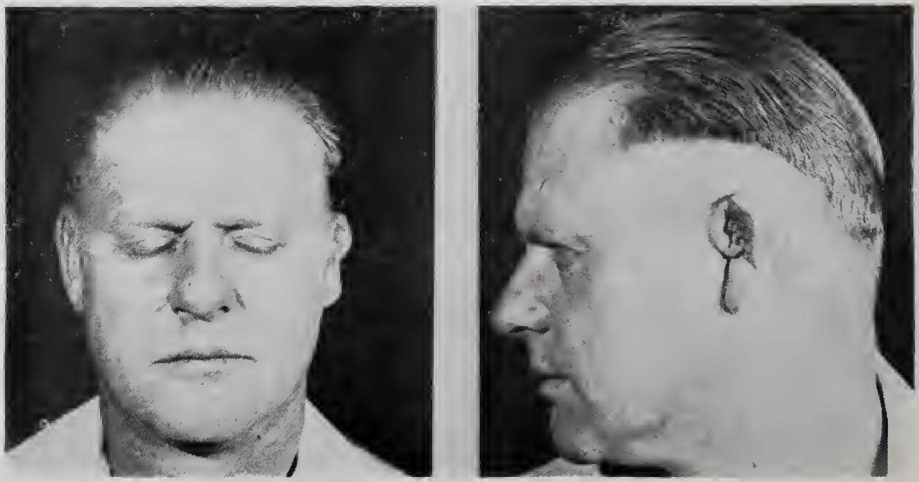

FIG. 2, b — Postoperative appearance after excision of contracted cartilage and restoration support by rib cartilage.

achieved. The problem in this case consisted of reconstructing a skin covered flap of the proper shape to replace the lost auricle and to endow it with sufficient rigidity to have it stand away from the head in a normal manner.

This was done by elevating a flap of postauricular skin and covering its raw surface as well as the doner site over the mastoid with a split skin graft. In another operation the flap was sutured to the remaining ear lobule, and the necessary rigidity was obtained by using suitably shaped pieces of rib cartilage. An acceptable cosmetic result was achieved. (Fig. 1, a & b.)

Case No. 2 — A man suffered a chemical burn of his left ear when it became accidentally flooded by muriatic acid. Following healing the ear became shriveled and deformed.

The problem in this case was twofold, first to remove the contorted ear cartilage which was distorting the structure of the ear, and secondly to replace the cartilage with supporting material which would maintain the normal outline of the ear.

A two-stage procedure was devised. In the first stage an anterior flap was elevated on the ear, and most of the cartilage was excised. The contracted ear was unfolded to a normal position, and a full thickness, free skin graft taken from the postauricular area was used to cover the defects resulting from unfolding the contracted ear. In a second stage operation, suitably shaped pieces of costal cartilage were inserted in order to give proper support to the reconstructed auricle. In this manner a relatively normal auricular outline which was self supporting was achieved. (Fig. 2, a & b.)

SUMMARY

Two cases are reported, illustrating the possibilities of reconstructive surgery in restoring traumatically deformed ears.

Tuberculosis Abstracts

TODAY'S TUBERCULOSIS PROBLEM IN ARIZONA — A STUDY OF PATIENTS' ORIGINS

Climate is not and never has been a substitute for hospital care in the treatment of tuberculosis and the delusion that it is, has cost many lives. Proof that this statement is still valid has been furnished by a study of the origins of tuberculous patients in Arizona initiated in the Fall of 1950 by the statistical service of the National Tuberculosis Association.

The study was exploratory and, of necessity, limited in scope. A complete assessment of the tuberculosis situation was impossible. Complete information is not available on the supposedly high but incompletely reported number of tuberculous patients in Arizona.

Except for the tuberculosis death rate, factual data on the tuberculosis control problem in Arizona are largely lacking. In 1950, Arizona's provisional death rate from tuberculosis was 68 per 100,000 population, the highest in the United States; this rate is almost double the recorded rate of nearby New Mexico — a state which has a significant amount of tuberculosis and many of the same problems as does Arizona. If the population or Arizona continues to expand — and there is every indication that it will — and if the tuberculous are not isolated, exposure to tuberculosis will continue to be a health hazard to everyone in this state.

The study of patients' origins was based on a review of the records of 1,735 tuberculous patients under medical care in Phoenix and Tucson. Certain personal data, place and time of diagnosis, history of hospitalization, length of residence in Arizona, and welfare status were ascertained. Although the analysis was partial, the information acquired by means of this study helps to determine the character of the tuberculosis problem in Arizona. The records studied included an approximately equal number of patients receiving public and private medical care.

Only one-fourth of the patients whose records were reviewed were of Spanish descent. Most were among the public patients. Arizona's position as a newcomer among the states is reflected in the fact that only 11 per cent of all patients were natives of Arizona. Most of these were of Spanish descent. Of all the patients studied approximately one-third had lived in Arizona less than five years prior to 1951. On the other hand, one-third of those receiving public care and 13 per cent of the private patients had lived in the state at least 20 years.

More than half the patients studied had been definitely diagnosed tuberculous before coming to Arizona. Three-fourths of the patients under private medical supervision were diagnosed prior to arrival in the state; on the other hand, of those medically indigent persons treated by means of public funds, only one-third had been diagnosed outside Arizona. Illinois, Ohio, California, Texas, and Michigan contributed the largest number of known tuberculous patients to Arizona.

Forty per cent of the patients studied were diagnosed as tuberculous in Arizona; of this group, 38 per cent had lived in the state at least 20 years before they discovered they had the disease. Only one out of five of these patients was diagnosed within five years after his arrival in the state.

The majority of the patients diagnosed prior to arrival had been hospitalized in other states, and this is true of many more private patients than of those whose care is paid for by public funds. Of the patients hospitalized elsewhere, 40 per cent came to Arizona less than a year after leaving tuberculosis hospitals.

Of the patients under public care for tuberculosis, more than half had sought aid from public or private welfare agencies or from both. More than half the patients whose records were reviewed had active tuberculosis at the time of the study; of those whose stage of disease was known, the great majority were diagnosed as far advanced, while only six per cent had minimal tuberculosis.

The large Spanish and Indian groups in the state plus a focus of infection among persons of Anglo-American nationality, some of it imported years ago and some of recent origin, produce an extremely high prevalence of tuberculosis in the state. This tuberculosis problem cannot be controlled with the present diagnostic and treatment facilities and the small number of available beds — 523 exclusive of those in federal hospitals.

Unfortunately for Arizona, the state will probably always attract the "respiratory cripple" since its climate enables him to live more easily if not unduly harassed by economic problems. The numerous individuals with active and arrested disease who live there may always constitute a focus of potential infection out of proportion to that in other states. Moreover the indigenous Spanish and Indian groups, apparently with high susceptibility to tuberculosis, are themselves large enough to account for Arizona's high prevalence of tuberculosis.

No state can afford to ignore a troublesome situation because it is partially caused by persons who did not originate there. It is not possible to trace the antecedents of every patient for generations in order to place the responsibility for his disease in another state; in fact, according to this report, almost 40 per cent of the persons diagnosed inside Arizona had lived in the state 20 or more years.

The ingrained though erroneous conviction of many Arizona residents that tuberculosis does not affect the state's indigenous population has led to an unusual situation, in that the state does not provide hospital and other public health facilities for even its own tuberculous residents, to say nothing of the numerous visitors, sick and well, who are attracted to the state as a result of exploitation of the mild climate.

Every state has an obligation to protect all its citizens from persons with active disease, whether they are residents or non-residents. Arizona today needs as a minimum at least 1,000 additional beds for tuberculous patients, no matter what standard of hospitalization is applied.

It is obvious that the program of education for the general public has failed to convince a great many persons that tuberculosis is a disease which is best treated in hospitals and not by climate. One wonders whether the education of individual patients by their own physicians is as thorough as it should be.

A vigorous program of general education concerning the ineffectiveness of climate as a cure for tu-

(Continued on page 31)

THE NEBRASKA STATE MEDICAL JOURNAL

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Vol. 38 January No. 1

THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

VA REORGANIZATION

The report on the survey of the Veterans Administration has been made public by Administrator Carl R. Gray, Jr. It was submitted to the VA a few weeks ago by the business management firm of Booz, Allen and Hamilton, which had been retained by the government to make a complete study of the agency's organizational structure. In making the 10-volume report public, Mr. Gray announced that reorganization of the Department of Medicine and Surgery is already underway.

One phase of the report is particularly of interest to the medical profession. This was the recommendation that the Veterans Administration ask Congress to clarify or revise the law regarding medical care for non-service connected disabilities. "Successful adoption of this recommendation will go far toward correcting a situation which has made the medical program (of VA) the constant target of criticism and misunderstanding, much of it undeserved. It will also make it possible for VA to discharge its important responsibility for soundly planning its medical program."

The report states that apparently Congress intended the VA to give medical care to non-service connected cases since it has authorized construction of more beds than are needed for service-connected cases. On the other hand, beds authorized are too few to take care of the potential non-service connected load.

Veterans Administration officials, the report said, have estimated that between 41,000 and 51,000 beds would be sufficient to meet all future needs for service-connected, chronic and long-term disabilities, it will need 25 per cent more beds than is currently being planned.

"Any one of the nation's anticipated total of approximately 22,000,000 veterans might . . . become a candidate for hospital care . . . Current conditions create variations and confusion which are extremely difficult, if not impossible, to plan for . . . Where legislation is the source of ambiguity and other difficulties of planning, VA should seek clarification or revision of the law."

As for the reorganization already started, the VA adopted many of the management experts' suggestions, although there was one significant exception. The report recommended that 20 medical centers be established, each for a specific area and with managers having full operating authority. Instead, the VA elected to continue its present system, under which the chief medical director in Washington is responsible for the operation of its 157 hospitals and 107 clinics. Under him are six area medical directors throughout the country. In brief, the new organizational plan places even greater responsibilities on the Chief Medical Director, Vice Admiral Joel T. Boone, and his staff.

RADIO PROGRAMS

An important function which your Public Relations Committee has undertaken is the sponsoring of radio programs on Nebraska stations. This project was begun 22 months ago and has received exceptional cooperation from the state's radio stations.

Up to the present time, 19 of Nebraska's 22 stations have participated in scheduling the programs which are 15 minutes in length. Each subject dealt with is divided into a series of 13 programs. Thus, the 19 stations have broadcast 572 fifteen-minute programs for a total of 143 air hours. With one or two exceptions, all of these programs have been broadcast as a public service.

Listed below are the stations that have accepted one or more of these series:

Alliance
Beatrice
Broken Bow
Columbus
Fremont
Grand Island
Hastings
Kearney
Lexington
Lincoln (KFOR)
Lincoln (KLMS)
Lincoln (KOLN)
McCook
Norfolk
Omaha (KBON)
Omaha (KOWH)
Omaha (WOW)
Scottsbluff (KNEB)
Scottsbluff (KOLT)

Currently there are eight stations carrying programs. They are: Alliance, Beatrice, Broken Bow, Fremont, Hastings, Kearney, Norfolk, and Scottsbluff (KNEB).

Your Public Relations Committee feels that it would be a fine PR gesture if a large number of physicians in these areas would write their stations and thank them for their excellent cooperation.

CRIPPLED CHILDREN'S CLINICS

January 3—Kearney, Good Samaritan Hospital; C. Fred Ferciot, M.D., or W. W. Bartels, M.D., and Warren G. Bosley, M.D.

January 17—Norfolk, High School; W. R. Hamsa, M.D., or L. S. Campbell, M.D., and J. Harry Murphy, M.D.

News and Views

From a wire service:

The Information Foundation announced December 7 that it plans to make a $275,000 study of the nation's voluntary health insurance plans. The foundation's president, Admiral W. H. P. Blandy (Ret.), said the study seeks to "determine the coverage and effectiveness of voluntary health insurance plans and indicate areas where extension of coverage and benefit provisions are required."

Dr. R. E. Garlinghouse, Lincoln, was elected Chief of Staff of the Bryan Memorial Hospital at an election of officers on Tuesday, December 9. Other officers elected were: Dr. S. O. Reese, Vice Chief of Staff; Dr. M. D. Frazer, Secretary, and Dr. G. E. Stafford, Treasurer, all of Lincoln.

Chosen to head the various departments were:

Dr. E. B. Reed, Internal Medicine; Dr. H. S. Taylor, General Practice; Dr. P. M. Bancroft, Pediatrics; Dr. S. L. Wolters, Obstetrics and Gynecology; H. R. Morton, Surgery; Dr. W. W. Webster, Oral Surgery; Dr. E. E. Angle, Urology; Dr. J. E. M. Thomson, Orthopedics; Dr. M. S. Wood, Eye, Ear, Nose and Throat; Dr. E. W. Rowe, Radiology; Dr. R. J. Stein, Neuropsychiatry, and Dr. F. H. Tanner, Pathology. All of the department heads are from Lincoln.

From Insurance Economics Surveys:

"Britain's ministry of health has invited druggists to whom it owes money under the state run national health service to take part in a 'lottery' to recover their cash, the Manchester Guardian reported.

"The newspaper said the ministry has fallen behind in pricing the millions of prescriptions dispensed by druggists this year. Under the health service, druggists hand over medicine and pills ordered and then forward the prescriptions to the ministry for payment.

"As a result of the delay, the Guardian said, the ministry is asking each druggist if he will allow medicines supplied between February and May this year to remain unpriced and instead accept a sum calculated on prescriptions he dispensed in the preceding three months.

" 'The financing and administration of the whole service urgently needs looking into,' the newspaper commented.

"Since last June, when the ministry ordered Britons to pay a shilling (14 cents) on every prescription made up, less medicine has flowed down the nation's throat. Only 14 million prescriptions were dispensed in August, against 17 million in June, 1951."

From Insurance Economics Surveys:

"An economist told the President's health commission . . . that Americans spend about the same amount for liquor, tobacco and smoking supplies as they do for health and medical services. Emerson P. Schmidt, director of economic research for the Chamber of Commerce of the United States, said 1951 spending for medical services totaled about $13,600,000,000. This included government as well as individual spending. In the same year the bill for alcoholic beverages, tobacco and smoking supplies was around $13,200,000,000, Schmidt said."

From the Scottsbluff Star-Herald:

The Association of American Medical Colleges came out (November 12) for a revision of selective service regulations concerning the drafting of doctors from medical college faculties.

The association . . . said it would welcome a chance to meet with selective service officials to go into the question. The resolution . . . asked for "a continuing procedure where those concerned with medical education may advise on desirable revision in present procedure and on the content of any new laws for the drafting of physicians.

From the Omaha World-Herald:

The first of four dinner meetings for doctors' office personnel was held November 5 at the Athletic Club. Secretaries and office nurses, in groups of 50, will be guests of Nebraska Blue Cross-Blue Shield.

Speakers representing the Omaha-Douglas County Medical Society were Dr. L. D. McGuire, President, and Mariana Gardner-Mathews, Executive Secretary. Other speakers were Dr. Arthur J. Offerman, Blue Shield President, and Dewey M. Bredemeyer, case department supervisor.

From an Omaha World-Herald editorial:

Dr. R. J. Wilkinson, President of the Southern Medical Association, recently said he had heard reports that 90 per cent of the men in Veterans Administration hospitals were there for non-service-connected disabilities — and yet V.A. is building more hospitals all the time.

Not so, says Vice Admiral Joel T. Boone, V.A.'s medical director. Only 65 per cent of the V.A. patients have non-service-connected disabilities. And of the 65 per cent, nine out of ten would never receive treatment if they had to pay for it.

On Admiral Boones' own statement, it would appear that the original concept for V.A. hospitals has been drastically changed. They were built to care for men whose disabilities originated in service. Later came this modification — that if there were any empty beds, they might be used by men with non-service-connected ailments, provided they signed a statement that "in their opinion" they could not afford private care. Now these patients — the ones who were supposed to get an occasional empty bed —constitute two-thirds of the V.A. hospital load.

Admiral Boone's statement that nine of ten with non-service-connected disabilities would not get care unless the Federal Government provided it free is beside the point.

The Government has not undertaken to protect veterans, any more than any other citizens, against the other hazards of life. It does not provide free dentistry, or free insurance. As we said before, V.A. seems to be bringing in socialized medicine by the back door.

From the Fremont Guide-Tribune:

The President of the American Medical Association says many doctors are refusing to volunteer for military service because they feel too much of their time is spent treating wives and children of armed forces members.

Dr. Louis H. Bauer, of Hempstead, N.Y., called upon the services to find out how much time military doctors spend caring for dependents because, he said:

"Questionnaires send to (medical) men on leaving the services cite this frequently as a cause of resentment — namely that they have been drafted from civilian life to take care of other civilians.

"The necessity for extension of the doctor draft will depend in part on the answer to this question."

From a wire service:

Rear Admiral Lamont Pugh, Surgeon General of the Navy, condemned "prima donna" doctors who avoid military service, and drew a prompt rebuttal.

Their main objection to military medicine, Admiral Pugh told the Association of Military Surgeons, "is simply a matter of easier, quicker and bigger money — avarice."

"Since when has the doctor of medicine and dentistry become such a pantywaist as to require that a bald responsibility others accept with good grace must be decked out with certain frills before he will buy it?" Admiral Pugh asked.

The American Medical Association came up swiftly with an answer.

"The fact is that most physicians, like most civilians, prefer a non-military life. When patriotism is at stake, the doctor, like every one else, is always ready to serve his country. During World War II more than 60 thousand physicians served in the armed forces — and not a single one was drafted. They all served voluntarily."

From the Lincoln Journal:

The University of Nebraska Board of Regents has decided to recommend to the next legislature a $6 million building program for the university's medical college. This was in line with a medical committee's recent report that improvements are needed if the school is to keep top standing.

The regents suggested the money could be raised through a special fractional mill levy to run for five years. It was recommended that the levy be set so as to provide about $1,200,000 each year.

The funds would be used in this manner: $5,200,-00 for University Hospital improvements; $615,000 for an addition to the nurses' home and $185,000 for campus improvements.

An Honor Award for Distinguished Service in Medical Journalism was established by the American Medical Writers' Association during its ninth annual meeting held in St. Louis, October 1st, 1952. A gift in excess of $2,000 from Harold Swanberg, M.D., of Quincy, Ill., secretary of the Association formed the basis of the award. The award will be given each year at the Association's annual meeting, "for accuracy, clarity and conciseness of published articles, editorials and other material, and/or distinguished and meritorious service rendered by a United States or Canadian medical periodical." Nominations must be made on or before February first of each year, addressed to Secretary, American Medical Writers' Association, W.C.U. Building, Quincy, Ill. This is believed to be the first award of this type established in North America and is designed to "help maintain and advance high standards of medical literature."

The Nebraska Public Health Association held its second annual meeting at the Fontenelle Hotel, Omaha, November 20-21, 1952. It was attended by representatives of the Nebraska State Medical Association, State and Voluntary Health Agencies and health leaders from many civic groups.

General sessions were featured, each in charge of a particular section in order to acquaint everyone with the activities of the various groups.

The banquet speaker was Mr. Harry Hanson, Assistant Surgeon General. Dr. Donald Dukelow of the American Medical Association spoke on "Health Education Program in the Community." Other out-of-state speakers were: Henry Bauer, Ph.D., Chief, Section of Medical Laboratories, Minnesota State Department of Health; Frederick S. Kent, U.S. Public Health Service, and Tom A. Burke, Director of Local Safety Programs for National Safety Council.

The theme of the convention, "Public Health and You," emphasized the need that every citizen has a responsibility in finding and helping to solve public health problems.

The officers for 1953 are as follows: Lewis Harris, Lincoln, president; Dr. S. I. Fuenning, Lincoln, president-elect; Ordella Geisler, D.V.M., Lincoln, secretary, and R. B. Willard, Scottsbluff, treasurer. Nine section chairmen were also elected.

News from Our Medical Schools

NEBRASKA PSYCHIATRIC INSTITUTE OPENS WESTERN CLINIC

The Western Clinic of the Nebraska Psychiatric Institute was opened at St. Mary's Hospital in Scottsbluff on December 15.

Sponsored jointly by the Board of Control and the University of Nebraska College of Medicine, the new clinic will provide psychiatric diagnosis, treatment and consultation services to the western portion of Nebraska, where such service was previously unavailable.

The need for such facilities and services in the western regions of the state has been proved through experience and investigation by the Omaha Institute, and has been voiced specifically by community and medical representatives in that area. The space for the clinic was generously donated by the St. Mary's Hospital.

Staffed by a competent group of professional personnel who have had the highest possible training in their respective fields, the clinic facilities will be available for children as well as adults. A psychiatric social worker will be at the clinic each day; a psychologist and psychiatrist will be available at scheduled times.

Services of the clinic are open to any resident of the state of Nebraska, but extended treatment will be given only to those unable to afford private care. If a family or individual can afford private psychiatric treatment, services of the clinic will be limited to consultation for professional opinions and recommendations. A few people may be charged for services rendered, with the rate based on the individual's ability to pay. Each case will be treated with strictest professional confidence.

It is preferred that applications for service be made through an individual's family physician; however, direct reference through other agencies may be accepted. Because of the limited staff, a waiting period may be expected betwen the time an application is received and the time services are rendered. However, the clinic intends to fully service all applicants in the most satisfactory manner.

Applications should be addressed to the Western Clinic, Nebraska Psychiatric Institute, St. Mary's Hospital, Scottsbluff, Nebraska.

FAMILY HEALTH ADVISOR SERVICE INSTITUTED AT UN COLLEGE OF MEDICINE

The University of Nebraska College of Medicine is one of five schools in the nation now offering a Family Health Advisor Service.

Sponsored by the department of preventive medicine, the medical social service department, and the clinical departments, the course is offered to students on an elective basis. It is designed to give them an opportunity to follow medical and other problems that arise in a family over a period of time, so that they can evaluate the social, economic, and emotional factors that are a part of, or bear relation to, every medical problem.

Each student participating in the service is assigned one family, which he will advise throughout a two-year period. He acts as an advisor only, referring any illnesses or health problems to a practicing physician. He visits the family regularly, keeping a diary-type record of his visits, and, at the end of each quarter, submits a written report, telling what he has learned from them, and what he has accomplished.

When, at any time, a member of the family comes to the clinic, the advisor is excused from class to go through with him. It is hoped that the student will have sufficient knowledge of the patient's medical history, as well as family background, to be of help to the practicing physician in making his diagnosis and prescribing care.

The course is under the direction of Dr. W. R. E. Newman, acting chairman of the department of preventive medicine.

PSYCHIATRIC AIDE COURSE ANNOUNCED

The Nebraska Psychiatric Unit will begin the second psychiatric aide course on January 5, 1953.

Sponsored jointly by the Board of Control and the University of Nebraska College of Medicine, the intensified four-month course is the only one of its type in the nation.

Ten trainees between the ages of 18 and 50 are accepted for each course. They receive meals, laundry, and salary during the training period, and are placed immediately after graduation at a minimum salary of $170 per month.

During their first three months of training at the Unit in Omaha, students study such topics as history of nursing and psychiatry, personal hygiene, nursing procedures, nutrition in health and disease, medical nursing, surgical nursing, mental hygiene, psychiatric nursing, hydrotherapy, occupational therapy, recreational therapy, geriatrics, group therapy, and attitude therapy. The final month of training is spent as a working aide at state hospitals in Norfolk, Hastings, or Lincoln.

Announcements

The Nebraska Society for Crippled Children urges county medical societies to choose a speaker on the problems of handicapped children for their March meeting, providing that the program for that month has not already been arranged. It is also announced by Mr. S. Orson Perkins, executive director of the Nebraska Society, that the annual Easter seal sale of the National Society for Crippled Children will be held during the period March 5 to April 5, 1953. For additional information you may address the Society at 1504 Dodge Street, Omaha 2.

The University of Nebraska College of Medicine, the C. W. M. Poynter Foundation and the College of Medicine Alumni Association will present the Poynter Foundation lecture and Postgraduate Assembly, on March 24-26, 1953. The C. W. M. Poynter speaker will be David Ivan Rutledge, M.D., a graduate of the College of Medicine in 1934. Doctor Rutledge is associated with the Leahy Clinic in Boston. There will be other guest speakers. A more complete program of speakers and other pertinent data will be found in a later issue of the Journal.

The University of Nebraska Medical Library facilities are available to any member of the Association. Requests for literature, either by subject or by specific reference, will be filled immediately, and the material will be sent by mail. Borrowers are asked to refund the postage. There is no other charge. Mrs. Bernice M. Hetzner, the Librarian, states, "We shall be glad to help Nebraska physicians work out their literary problems." Write Mrs. Hetzner at the University of Nebraska College of Medicine Library, 42nd and Dewey Ave., Omaha 5, Nebraska, if you wish this service.

The Thirteenth Annual Essay Contest of the Mississippi Valley Medical Society will be held in 1953. The Society will offer a cash prize of $100.00, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics and education) and practical value to the general practitioner of medicine. Certificates of merit may also be granted to the physicians whose essays are rated second and third best. Contestants must be members of the American Medical Association who are residents and citizens of the United States. The winner will be invited to present his contribution before the Eighteenth Annual Meeting of the Mississippi Valley Medical Society to be held in Springfield, Ill., Sept. 23, 24, 25, 1953, the Society reserving the exclusive right to first publish the essay in its official publication—"The Mississippi Valley Medical Journal" (incorporating the "Radiologic Review"). All contributions shall be typewritten in English in manuscript form, submitted in five copies, not to exceed 5,000 words, and must be received not later than May 1, 1953. The winning essays in the 1952 contest appear in the January 1953, issue of the "Mississippi Valley Medical Journal" (Quincy, Ill.). Further details may be secured from Harold Swanberg, M.D., Secretary, Mississippi Valley Medical Society, 209-224 W.C.U. Building, Quincy, Illinois.

The Nebraska Chapter of the Arthritis and Rheumatism Foundation Board of Trustees held its first meeting on October 31st. General George C. Kenney, President of the National Foundation was the speaker. Officers of the local chapter are: Mr. V. J. Skutt, president; Drs. F. Lowell Dunn and Harold N. Neu and Mr. Howard Le Clair, vice presidents; Dr. Henry J. Lehnhoff, Jr., secretary; Mr. Henry B. Pierpont, treasurer; Mr. Howard Kennedy, 3rd, legal advisor; Mr. John O. Bozell, public relations; Dr. Eugene E. Simmons, chairman, Executive Committee. Applications for membership may be made to the secretary at 536 Medical Arts Building, Omaha 2, Nebraska.

The annual Clinical Conference of the Chicago Medical Society will be held March 3-6 inclusive, at the Palmer House in Chicago. As usual this Conference will cover fields interesting to both the specialist and general practitioner and will include presentations by a faculty of thirty-five to forty speakers. There will be lectures, demonstrations and panel discussions. Non-members will be charged a registration fee of $5.00.

The University of Minnesota will present a continuation course in "Recent Advances in Diagnosis for Internists" at the Center for Continuation Study on February 16-18, 1953. Although intended primarily for specialists in internal medicine, the program will be of interest to many pediatricians and general physicians. This course will provide information concerning techniques introduced or developed within the past five to ten years, that have increased our knowledge of basic physiology and that are becoming or give promise of becoming standard diagnostic proceedures. Recent developments in the fields of cardiology, respiratory disease, renal disease, hematology, gastro-enterology, and endocrinology will be emphasized.

The faculty for this course includes, besides clinical and full-time members of the staff of the Minnesota Medical School and the Mayo Foundation:

Dr. C. J. Watson, Professor and Director, Department of Medicine, University of Minnesota Medical School;

Dr. Carl V. Moore, Professor of Medicine, Washington University School of Medicine;

Dr. Thomas E. Machella, Assistant Professor of Medicine, University of Pennsylvania Hospital;

Dr. Robert P. Grant, U.S. Public Health Service, Baltimore;

Dr. William W. Engstrom, Associate Professor in Medicine, Marquette University School of Medicine.

Lodging and meals are available at the Center for Continuation Study. For further information address Robert B. Howard, M.D., University of Minnesota Medical School, Department of Continuation Study, 3330 Powell Hall, Minneapolis 14.

The American Medical Association has published a "List of Films Available Through the Motion Picture Library," revised and up to date as of December 1, 1952. There are listed sixty-six films suitable for medical societies, medical schools, hospitals and other scientific groups, and twenty-three suitable for auxiliaries and other lay groups. Some are in color and some in black and white; some are silent and others, with sound. For most there is a small service charge. Anyone who is interested may write to Committee on Medical Motion Pictures, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois. You will receive a pamphlet containing a complete list and other pertinent information, in response to your request.

The First Western Hemisphere Conference, World Medical Association, in conjunction with Pan American Medical Confederation; and, Diamond Anniversary of Medical Progress, will be held at Richmond, Virginia April 23-25, 1953. The preliminary program appears to promise both a highly informative series of meetings and a very pleasurable exhibition of the Virginian hospitality. For further information, queries may be addressed to: Arrangements

Committee, Diamond Anniversary of Medical Progress, Suite 3201, 444 Madison Avenue, New York 22, N.Y.

A Postgraduate Course in Diabetes and Basic Metabolic Problems will be conducted by the American Diabetes Association under the direction of Charles H. Best, C.B.E., M.D., F.R.S., Director of the Banting and Best Department of Medical Research of the University of Toronto, on January 19, 20, 21, 1953, at the University. Registrants limited to 100. Fee, $20.00 for members and $40.00, nonmembers. For further information, write American Diabetes Association, 11 West 42nd Street, New York 36, N.Y.

The Woman's Auxiliary

HAPPY NEW YEAR

It's the same old greeting but somehow we say it with renewed hope and enthusiasm this year. There was a feeling in the air as the old year passed away that we had been given another chance to prove we are worthy of the heritage passed on to us by generations of devout, earnest Christians who believed in the destiny of this our United States.

The joyous Christmas Season which we have just celebrated was a time for renewing old friendships, partaking life's deepest joy in the happiness of our children, and contributing of our time and our means to bring happiness to those less fortunate than we. The feeling of peace and goodwill which comes to all during the holiday season can stay with us if we all resolve to work together to bring about the "Peace on Earth Good Will Toward Men" of which we sang so often just a few short weeks ago.

So let us join together in a Resolution for the New Year. Let us resolve to work together for world leadership in the way of Peace. With humility in our own hearts, let us realize that this must start at home in understanding and friendly cooperation with those closest at hand. It must continue in our contributions to and participation in the affairs of our own communities. It must be followed by a keen interest in the affairs of our state and a watchful eye upon those who represent us in Washington. The strength of this nation is in the integrity of its citizens. Cherish the new chance you have been given to keep your country free. Guard and preserve it with your sincere and thoughtful interest.

MARIAN GARLINGHOUSE,
President.

The Faculty Women's Club of the University of Nebraska School of Medicine had its annual dinner for Medical Students and Nurses in December at Conklin Hall.

Guests were residents, interns, medical students, student and graduate nurses and faculty members of the college.

Hostess chairmen for the dinner were Mrs. J. Allen Davis and Mrs. W. Howard Morrison.

Mrs. W. D. Wright of Omaha entertained Doctors' Wives' Club at a holiday tea at her home on December 2nd.

Assisting were Mesdames Herbert Davis, Paul S. Read, Glenn Whitcomb, William J. Nolan, John Gatewood, Charles Frandsen, J. Calvin Davis, Floyd S. Clarke, John A. Borghoff and John F. Hyde.

The annual Christmas dinner for members of the Adams County Medical Association and the Auxiliary was served on December 3rd at the Hastings State Hospital.

Following dinner the group visited the display of handicrafts in the occupational therapy department and then saw a movie.

The Fillmore-Saline County Medical Association and Auxiliary met in Friend on December 4th.

Dr. and Mrs. V. S. McDaniel of Sargent were honored on November 16th when a group of friends gathered at their home to observe their silver wedding anniversary. Among the guests present were Dr. and Mrs. Carl Emick of Loup City who entertained the group with colored slides which they took on their trip to various European countries last summer.

Harvard's new doctor's office held open house on November 25th. The public was invited to meet Dr. and Mrs Hermsen and to see the interior of the new building. Refreshments were served.

In early December, Dr. and Mrs. Richard Thomas of Lincoln traveled to New Orleans where Dr. Thomas attended a medical meeting and Mrs. Thomas "did the shops."

The first of a series of teas sponsored by the student nurse recruitment group of the Lancaster County Medical auxiliary was held on December 5th at St. Elizabeth hospital. The teas are planned for those high school students interested in a career of nursing and the December guests were twenty-six girls from Cathedral high school.

Preceding the tea, there was a movie on the work of nursing organizations and discussion of the formation of clubs for future nurses. Mrs. K. S. J. Hohlen was in charge of the affair.

Mrs E. A. Watson, wife of Dr. E. A. Watson, passed away on November 24, 1952. Mr. Watson had been a member of Tri-County Medical Auxiliary since it was first organized in 1931.

Know Your Blue Shield Plan

Participating Physicians who do not have a Blue Shield plaque for their reception rooms may secure one, without charge, by addressing a request to the Blue Shield Plan.

It is estimated that Nebraska Blue Shield payments during 1952 exceeded $1,730,000. This represents an increase of about $200,000 over 1951, when payments totaled $1,521,000.

NOVEMBER SUMMARY

	Blue Cross	Blue Shield
Membership, Dec. 1, 1952	236,341	204,960
Number of Claims	2,872	4,776
Payments in November	$193,741.51	$137,713.00
Per Cent of Income for Claims	79.43	74.62

Plans are being made to hold district meetings for doctors' office personnel in several Nebraska cities. The meetings, to be co-sponsored by the county medical societies and Blue Cross-Blue Shield, will be held for the purpose of discussing the public relations program of the medical profession, and prepayment health care.

A copy of the January 1, 1953 edition of "Schedule of Benefits and Instructions to Participating Physicians" will soon be mailed to all Nebraska doctors. Enclosed with it will be a copy of the new "Roster of Blue Shield Participating Physicians." Additional copies of these booklets will be sent on request. Many doctors ask for a second copy of the Schedule, for the secretary.

More than 90 per cent of the members of the Nebraska State Medical Association in private practice have signed as Blue Shield Participating Physicians on the basis of the new income limits. They have agreed to accept the Blue Shield benefit as full payment for services rendered to Blue Shield members whose annual incomes are under $2,400 (single) and $3,200 (family). The new Roster, listing these doctors, will be mailed to the Group Leader of each of the 3,600 Blue Cross-Blue Shield Employee groups in Nebraska. By providing service benefits, the more than 1,000 doctors who are continuing their participation are contributing to the success of the prepayment medical care movement.

Reminder: If you have not received your copy of the new Schedule of Benefits and the Roster by January 15, please notify the Blue Shield Plan, and these publications will be sent to you.

Deaths

Dr. Edgar E. Anderson, Lyman. Doctor Anderson died at his home in Lyman, on Sunday the eighth of December. He was forty-two years old.

Dr. Homer D. Lurvey, Omaha. Doctor Lurvey, retired, died at the age of sixty-nine, at the Veterans' Hospital in Omaha, on Nov. 12, 1952. He is survived by his wife, Lola; four sons, Lloyd, Herbert, John and William; and, four daughters, the Misses Ann and Sue, Omaha; Mrs. Helen Andrews, Blair, and Mrs. Lillian Thieman, Omaha.

Dr. Norman H. Atwood, Omaha. Doctor Atwood died on December 9, 1952, shortly after being struck by a car in front of his home. He had been the senior Police Department physician in Omaha for many years. He was sixty-six years old. There are no immediate survivors.

Dr. John R. Nilsson, Omaha. Doctor Nilsson was seventy-four years old at the time of his death. He had practiced medicine more than fifty years. The doctor is survived by his wife, Wilhelmine; daughters, Mrs. Helen Sumners, Minneapolis; Mrs. Henrietta Byrne, Omaha; Miss Joan, Omaha; son, Dr. John F., Omaha; one sister, one brother, and two grandchildren.

Dr. J. North Evans, San Antonio (formerly of Columbus). Doctor Evans died in San Antonio, Texas, on November fifth, at the age of sixty-two. He was the son of Dr. Carroll D. Evans of Columbus and practiced medicine in that city for a number of years. He was identified with the National Guard for years and served in the Armed Forces during World Wars I and II. He is survived by two sons and two daughters.

Dr. Harold Robert Stowe, Scottsbluff. Dr. Stowe was found shot to death, at his home, on December 1, 1952. He was thirty-five years old. He is survived by his father, Dr. Harold B., and a brother, Ernest, a Bluffs attorney.

Dr. Clarence P. Fox, Morrill. Doctor Fox was a seventy-seven year-old, retired Morrill physician. He was killed instantly in an automobile collision near Huntley, Wyoming, on Nov. 10, 1952. The doctor is survived by his wife; one son, Howard; two daughters, Mrs. Frances J. Kelley and Mrs. Lucille Thompson, both of Morrill; two brothers, Arthur and Alvin, both of Morrill; a sister, Mrs. Elsie L. Kivett, Minneapolis, and a number of grandchildren, nieces and nephews.

Dr. Robert C. Byers, Sr., Fremont. Doctor Byers died in an Omaha hospital on November 8, 1952, at the age of seventy-seven. He had practiced medicine in Fremont nearly fifty years. Besides his widow, Laura, there are two sons, both physicians, Robert C., Jr., of Fremont, and Malcolm S., of Medford, Oregon; three daughters, a brother and ten grandchildren.

TUBERCULOSIS ABSTRACTS

(Continued from page 23)

berculosis should be carried on by public and voluntary agencies, notably the National Tuberculosis Association and its constituent associations. Such a campaign should be directed not only to the American population at large, but to welfare agencies throughout the country, both public and private, and to the medical profession as well. It should be emphasized by every possible means that the man or woman with active tuberculosis cannot substitute climate for hospital care without grave danger to himself and those in contact with him.

—By Eleanor C. Connolly and Martha Carr Jones, Statistical Service, National Tuberculosis Association, June, 1952.

Human Interest Tales

Comunications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

DOCTOR . . . Please take each copy of your Journal home. The wives complain that they never get to read the Auxiliary column.

Dr. R. L. Thompson, formerly of Sterling, Colorado, is now practicing in Grant.

Dr. E. T. Zikmund, Central City, was called up for naval service on November 7.

Drs. D. O. Hughes and Ralph Casel, Fairbury, are now located in their new office quarters.

Dr. Harvey Hertz, Trenton, was inducted into the Air Corps during the middle of November.

Dr. S. H. Perry, Gothenburg, has returned to his practice after being discharged from the Navy.

Dr. Norman Halley, who formerly practiced at Hay Springs, is now practicing in Torrington, Wyo.

Dr. Nancy Catania, Omaha, resigned December 1 as medical director of the Supreme Forest Woodman Circle.

Dr. Wayne Brewster, Holdrege, was seriously injured in an airplane crash at Quincy, Illinois, November 23.

Drs. Theo Koefoot, Sr., and Theo, Jr., of Broken Bow, recently moved into their new all-modern office building.

Dr. Harlan S. Heim, Humboldt, discussed several health topics at a meeting of the local Rotary Club, November 10.

Dr. Herbert H. Davis, Omaha, spoke before the local Rotary Club, December 10, on "Recent Advances in Surgery."

Dr. W. C. Cole, a 1951 graduate of the Creighton University School of Medicine, has established his practice in Gretna.

Dr. Gerald A. Kuehn, formerly of Grand Island, has moved to Hastings where he is now associated with Dr. Paul Charlton.

Dr. Charles A. Tompkins, Omaha, spoke on "Problems of the American Home" before the Omaha Parents' Club, November 16.

Dr. Joseph Pestal, Wahoo, spoke to the local Lions Club, October 28, on "Is Human Progress Caused by Voluntary Action?"

Dr. John A. Meier, Broken Bow, leaves his practice there on January 1 to begin a residency in orthopedic surgery at Memphis, Tenn.

Dr. J. B. Redfield of North Platte, presided at the recent session of the Nebraska Public Health Association which was held in Omaha.

Dr. H. E. Eggers, Omaha, showed a film and spoke on the topic of cancer at a November 18 meeting of the South Omaha Women's Club.

Dr. E. L. MacQuiddy, Omaha, presented a paper on "Amoebiasis" to members of the Tri-County Medical Society in Fremont on November 24.

Dr. Richard Johnson, Omaha, addressed the Corrigan School Mothers' Club, November 12, on "Health Problems of School Age Children."

Dr. J. P. Thomassen, Creighton University School of Medicine graduate, has established his practice in Neligh. He formerly practiced in Los Angeles.

Dr. A. J. Callaghan, North Platte, is the new President of the St. Mary hospital staff. Dr. William Niehus was elected Vice President and Dr. N. Chick, Secretary-Treasurer.

Dr. Frank Cole, anesthesiologist at the Lincoln General Hospital, Lincoln, has been recently appointed Editor for Anesthesiology on the editorial board of Current Medical Digest.

Dr. Frank Barta, Omaha, spoke on "The Psychiatry of Everyday Life" when he addressed a meeting of the Union Pacific Sports Club Forum, December 4, at Joslyn Art Museum.

Dr. C. N. Sorensen, Scottsbluff, is President of the Panhandle Memorial Cancer Fund Association. Other members on the Board of Directors are Drs. L. E. Hudgel, Scottsbluff, and Ivan Lovett, Scottsbluff.

Dr. B. N. Greenberg, York, has been elected a member of the University of Nebraska Board of Regents. There are now two physician-regents. Dr. Earle G. Johnson, Grand Island, was elected to the board in 1951.

Dr. Morris Nielsen, Blair, is the 1952 recipient of the Lincoln Kiwanis Club's Medal for Distinguished Service. He is the first member of the medical profession to receive it. The award was made at Lincoln on November 21.

Three Nebraska physicians have been named councilors of the Regional Neuro-Psychiatric Organization (Nebraska, Iowa and South Dakota). They are: Drs. Cecil Wittson and C. H. Farrell of Omaha, and F. L. Spradling of Lincoln.

Col. Robert J. Benford, M.D., University of Nebraska College of Medicine graduate, was general chairman of the annual meeting of the Association of Military Surgeons of the United States, held in Washington, November 17-19, 1952.

Dr. Charlotte Sievers, Fremont, has been named President of the Tri-County Medical Society. Dr. R. C. Byers, Jr., Fremont, is the new Vice President, and Dr. C. C. Nelson, Fremont, is Secretary-Treasurer. Dr. Grant Reeder, Fremont, was elected Censor.

Dr. and Mrs. F. W. Karrer, who now make their home in York, celebrated their 50th wedding anniversary on November 26. Dr. Karrer, now retired, practiced for many years at Benedict, Nebraska. The couple has three physician sons practicing in Nebraska: Dr. F. M. Karrer, McCook; Dr. Robert E. Karrer, York, and Dr. R. W. Karrer, Minatare.

Dr. Arthur J. Offerman, Omaha, has been chosen President-elect of the Omaha-Douglas County Medical Society. He will become President in 1954. Dr. Elmer W. Bantin, Omaha, is the 1953 President, succeeding Dr. L. D. McGuire. Named to the Executive Board at the December 9th election were Drs. W. J. McMartin, C. H. Hansen, and C. C. Millett.

Dr. John A. Tamisiea of Omaha, a Colonel in the Reserve, recently returned from a ninety-day recall duty with the Air Force. During this time he took the Air Force's new thirty-six bed Air-Transportable hospital to England and gave it its first trial run with the 2nd Bomb Wing from Hunter Air Base. While in Europe he attended the Interim Meeting of the Aero-Medical Association in Paris.

On November 28, the Nebraska City News-Press carried an interesting account of the flying trip Dr. C. R. Williams, of Syracuse, took to Burr, Nebraska, during the late November snow storm, in an effort to "beat the stork." He did, and delivered a nine-pound baby at a farm home. That night Dr. H. S. Gately, also of Syracuse, was marooned in his automobile four miles west of Nebraska City from 7 p.m. until the blizzard abated about 4 a.m. He then made his way to a farm house.

The Nebraska State Medical Journal

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EDITORIAL

THE MEDICAL EDUCATION COMMITTEE REPORT

Our State Medical Association became concerned over the possible loss of standing, by the University of Nebraska College of Medicine, as a class A medical school, which was threatened as a result of unfavorable reports following inspection by the American Medical Association and the American Association of Medical Colleges. President Harold Morgan appointed a committee from the State Association to study this situation and to report its conclusions and recommendations to the House of Delegates. This Medical Education Committee consisted of Doctors D. B. Steenburg, Chairman; C. H. Sheets, Earl Leininger, F. L. Rogers, H. J. Lehnhoff, Jr., Earle G. Johnson and F. Lowell Dunn.

In addition to a thorough study of Nebraska's medical school, the committee, with the help of Dean Tollman and the approval of Chancellor Gustavson, studied the medical schools of Arkansas, Oklahoma, Colorado, Iowa, Kansas, Minnesota, Utah and Oregon. The investigations were made by a combination of questionnaire and personal survey by members of the committee.

As a result of this study and a comparison of items of major importance in adequate teaching of medicine, the inadequate facilities of Nebraska were highlighted. On the basis of this mass of information the committee made nine recommendations to the House of Delegates when it met in special session on January 11th. These recommendations embodied the following points: That a reorganization of staff procedures in the medical college place strong authority and responsibility on the chancellor and the dean; at an early date, full-time teachers be employed in not less than four indicated fields of medicine; that full-time teachers be permitted, under specified restrictions, to engage in consultation practice in the University Hospital; that a member of the Medical Education Committee be a full member of the policy-making body of the medical school; that all interested groups make every effort to utilize to the fullest extent, the teaching resources of Omaha—the Children's Memorial, Douglas County and Veterans hospitals; that full use be made of teaching possibilities outside of Omaha — preceptorships, Lincoln hospitals, etc.; that members of the teaching staff of the medical school shall constitute at least seventy-five per cent of the staff of any hospital that may be built on the campus in the future and that any such hospital shall make "hard-core" beds available to the school together with adequate space for undergraduate teaching; and, that the Board of Regents endorse the specific appropriation of funds for the medical school and disseminate to the public information as to the portions thereof spent for teaching and research and for care of patients in the hospitals.

In addition to these recommendations, a resolution was introduced to direct the attention of the Governor and Legislature to the serious deficiencies of the medical school, to furnish them or their committees any accumulated information bearing on the needs of the school, and to ask the Legislature to specifically appropriate funds for the medical school.

The whole matter was discussed by various members of the committee for the greatest possible clarification. Dr. Perry Tollman, the dean, indicated his hearty approval of the recommendations. Dr. James Kelly emphasized that this committee has been entirely impartial, and should the occasion arise, would work with the same zeal for the Creighton University School of Medicine.

It was emphasized by several speakers and capped by a resolution introduced by President Morgan, that the volunteer teaching staff of the College of Medicine has done a masterful job through all the years of continuous financial neglect of the medical school, and that the present actions were not, in any sense, critical of it, but only proposed to be helpful.

After due consideration, the House adopted the report of the committee and the resolutions without dissenting vote.

PROGRESS IN CARDIAC THERAPY

As in all human endeavor, changes in cardiac therapy occur frequently, but progress is much slower. An attempt will be made to evaluate steps which may indicate progress.

Since Withering introduced digitalis in 1785 much has been written, but little has been added to his original instructions for its use. He recommended that the drug be used in a dosage to achieve certain definite effects. At present, the dosage administered, is often the criterion of therapy, rather than the effect produced. The present flare of the use of the glycosides instead of the powdered leaf has led to a new source of misuse or misunderstanding. The small dosage of these glycosides is not always reconciled with its equivalent dosage in the powdered leaf, leading to an over or underdosage. This confusion has been enhanced by a multiplicity of tablets varying from 0.1 to 0.2 mgm. in each, having little difference in size, and produced in various colors.

Obviously, the use of digitalis is a precision therapy not unlike that of insulin, and meticulous attention must be given to the dosage. It must also be administered so it can reach the heart. With good digestive function the oral route is preferable. In the presence of nausea and vomiting due to portal stasis it may not be absorbed. With large depots of retained fluid it may be puddled in this fluid. Under these circumstances the intravenous route is preferable. If given intramuscularly it should not be given into edematous areas. With careful scrutiny of digitalis dosage it becomes evident that an idiosyncrasy to the drug is a rarity; the so-called intolerance is usually cured by increasing the dose, and administering it by an effective route. The dictum of Wenckebach seems correct. "Whatever reputation I may have achieved in treatment of heart disease is due to fact that I used digitalis, where it was forbidden by the authorities and the textbooks." On the other hand, unsupervised prolonged use of digitalis or its glycosides may produce toxic effects from overdosage.

Studies in the role of sodium in congestive heart failure can be accepted as progress. The simplest therapeutic procedure is the restriction of sodium to 400 mgm. With removal of edema the simple expedient of using no salt in food preparation, or at the table may suffice. The cruel regime of marked fluid restriction of former days is no longer tenable. The liberal use of fluids has made life much more tolerable for these patients. The use of fairly large amounts of distilled water, up to 3,000 or 4,000 cc. as recommended by Schemm, usually leads to effective diuresis. The assumption that water is necessary to remove sodium is supported by clinical results. Tap water in many localities contains an excess of sodium.

The sodium-absorbing resins sometimes are very effective. Their great advantage is that food may be taken with reasonable amounts of sodium, making it more palatable. Recent modifications have greatly increased the usefulness of these resins. It seems that it can be anticipated that the sodium-absorbing resins will occupy an important role in therapy of congestive heart failure.

Mercury diuretics have been used over twenty-five years. Administration is very simple with the latest preparations. They increase the excretion of sodium by preventing its reabsorption in the convoluted tubules of the kidney. Frequently they produce a huge diuresis. All too often the water "squeezed out" one day "runs back" the next. The huge amount of fluid removed rapidly may produce digitalis intoxication from the digitalis bodies "puddled" in the edema fluid. The cardiac patient is often dehydrated; the rapid removal of large amounts of fluid may augment this. Cases which have been subjected to sodium restriction may be thrown into a low sodium syndrome with its critical effect. Recognition of this syndrome, may be life saving. If there is no increase in urinary output with the use of a mercury diuretic the low sodium syndrome probably is present. If these substances are continued or as might be done, the dose increased, a fatality may result. In general, it becomes quite evident that mercury diuresis should always be used with discretion

(Continued on page 60)

The Control of Heart Failure

JEROME RITTER, M.D.
Lincoln, Nebraska

Doctor Ritter traces the treatment of heart disease from antiquity to the present. He expounds the backward and forward theories of failure but stresses the fundamental conception that failure means a lack of adequate blood supply to vital tissues. He analyzes modern treatment in relation to the ends it attempts to accomplish and advises that one should resolve each case along these lines.

EDITOR

INTRODUCTION

The patient with heart failure has been a problem for the physician from the days of the earliest practice of medicine. Satisfactory control of this common condition however, has been achieved only in modern times. Recent spectacular therapeutic advances in other fields of medicine have perhaps pushed into the background the slow but steady progress made in the treatment of the failing heart. It has seemed proper, therefore, in discussing modern methods in the control of heart failure, to survey briefly the ideas and achievements of the past, as well as to present the situation as we know it today, in order to appreciate more fully what has been accomplished to relieve the symptoms and prolong the lives of those individuals comprising this ever-enlarging segment of medical practice.

REVIEW OF TREATMENT IN FORMER PERIODS

The individual with heart failure confronts the physician today with the same symptom for which his forbears sought the physician of yesterday. Since the physician of former times usually did not know that the heart was the basis for his patient's complaint, and always concerned himself with the symptoms, we must search under the headings of the symptoms we now know are usually due to the failing heart to determine how cardiacs were treated. Specific therapy for heart failure is an achievement of modern times. We may epitomize therefore, what served as the basis of therapy prior to modern medicine by a few quotations from Hippocrates. In their simplicity and ignorance, these writings nevertheless summarize the best that was available in all the centuries before the 18th, during which the new drug, digitalis, was introduced. For the patient with edema and dyspnea then, Hippocrates advised (Adams(1)) "laborious exertion, fomentations and abstinence are to be enjoined. The patient should eat dry and acid things, for thus will he pass the more water and his strength be kept up. If he labors under difficulty of breathing, if it is the summer season, and if he is in the prime of life and is strong, blood should be extracted from the arm, and then he should eat hot pieces of bread, dipped in dark wine and ale, drink very little and labor much, and live on well fed pork, boiled in vinegar, so that he may be able to endure hard exercises." Observe the emphasis on the acid diet and also the advocacy of venesection in the dyspnea of "the prime of life," surely the plethoric hypertensive! Fluid restriction was likewise advised. There is much in this treatment that might have been effective. Little was added for centuries, and much later, Galen, the great authority, can only say there are more varieties of dropsy than Hippocrates described and complains that the rules of venesection are not laid down with sufficient precision.

He furthermore found fault with the recommended diet, remarking on the difficulty of digesting dark-colored wine and pork after letting blood. The lack of significant addition to the understanding of heart failure in the times of Galen precluded any scientific advance in the ages following, since they took over the legacy of antiquity, contributing nothing but sterile, endless commentary. Thus, the Hippocratic writings played a decisive role in the practice of medicine and medical teaching up to the very threshhold of the modern period.

No real change was introduced in the treatment of heart failure until digitalis was used by Withering; and although digitalis was the first specific cardiac drug the use of which was reasonably understood, even that was not considered in its proper light, since cardiac and renal edema were not then differentiated.

The next advance, the use of quinidine by Wenckebach, brings us to the present era. Thus it is easily seen that the routine therapy of today is indeed the development of our own times, and as much a modern achievement as, for example, chemotherapy or neurosurgery.

DEVELOPMENT OF THE CONCEPT OF HEART FAILURE

The concept of heart failure is also recent. In antiquity and the Middle Ages, and of course, frequently today, physicians treated symptoms. It was not until Sydenham that specific diseases were differentiated; and, since heart failure is a syndrome of great complexity, it is obvious that more simple manifestations of diseases such as infections, would first be elucidated.

In reviewing the history of therapy for heart failure, we may distinguish two periods: the first period, when heart failure as such was not recognized, and therefore treatment was directed at symptoms which we know now may, or may not, have been due to heart disease; and the second period, when the clinical syndrome of "cardiac decompensation" had become understood, and treatment was directed specifically for and with that organ in mind. Thus, although we are attempting to trace the development of therapy, we are forced to turn our attention to pathology and follow the rise of knowledge which linked the symptoms of heart failure to the disease in the heart itself.

The symptoms of heart failure, such as dyspnea, orthopnea, edema, etc., were, of course, known to the ancients. The various diseases causing similar symptoms however, were not differentiated, neither in antiquity nor until modern times. Thus, the edema of cardiac disease, renal disease, malnutrition, cirrhosis, deficiency states, etc., were all considered as dropsy, an entity in itself, to be considered as acute or chronic, much as all fevers were lumped together and classified as intermittent, remittent, etc. Similarly, breathlessness was not understood to be due to a variety of causes, but treated as a disorder in itself. No further progress could be accomplished until a correlation of the symptoms in the living person was made with the findings at autopsy. Many centuries were to elapse before the beginnings of this procedure were established. This is not to say that heart failure was not treated nor that observations on heart disease were not made. As we have seen, Hippocrates had effective methods at his disposal and anatomists had seen much disease in the heart. Clinicians (Baglivi) had also described symptoms of heart failure. But medical historians tell us it was not until the 18th century (Lancisi) that changes observed at autopsy were said to be the cause of symptoms in the living. Real understanding of heart disease may be said to date from that time. Specific therapy in the sense we use it today, is of still later date.

MODERN VIEW OF HEART FAILURE

This brief resume indicates clearly that the concept of cardiac disease and the symptoms due to it are relatively late developments in the history of medicine, and effective therapy is of very recent origin. The foundation of this understanding was Harvey's demonstration of the circulation of the blood. Continued pathologic observation furnished material for speculation and a beginning understanding of circulatory breakdown. Finally the stage was set when Vieussens, in 1715, first suggested the backward failure hypothesis. By the time of Corvisart, sufficient background was available for a capable clinician to propound theories which were sound and reasonable. Corvisart advanced the backward theory of failure with the words "the difficulty of respiration appears to belong solely to the accumulation of the blood in the vascular system of the lungs."

As Harrison(4) points out, this concept was developed in great detail by James Hope. The backward failure theory was, of course, easily strengthened by the frequent demonstration at the autopsy table of incompetent valves. The first reversal of the cycle of paying too much attention to the valves and neglecting the myocardium appeared in the works of Stokes, who pointed out that the myocardium was the key to cardiac pathology. This view was strengthened by Cohnheim's studies, when he showed that the manifestations of cardiac failure were dependent on diminished output as well as back pressure. Stokes' ideas of the importance of the myocardium and the concept of forward failure were championed by Mackenzie, who dominated the thinking of his time.

At the beginning of our own period therefore, two clear and reasonable theories of the cause of failure were proposed, and rational therapy had been developed and put to good use. These theories, of backward and forward failure, are still being argued today, and form the basis of our understanding of cardiac decompensation.

SEQUENCE OF EVENTS IN HEART FAILURE

The simplicity and directness of the backward failure theory makes it very attractive to physicians attempting to obtain a clear picture of the syndrome of cardiac decompensation. Blood piling up behind the inadequate cardiac pump is retained in the veins under increasing pressure until that pressure overcomes the effect which the plasma proteins exert to cause the return of fluid from the tissues to the blood stream. Pulmonary congestion and edema are logical results of such a situation.

Unfortunately, it has been repeatedly observed that failure is present in the absense of a raised venous pressure, nor does the backward failure hypothesis furnish the explanation for the increased blood volume which is invariably present in heart failure. Moreover, it has been demonstrated that in certain types of failure, an output above the normal exists. Thus, the concept of forward failure was not discredited; and when methods were developed, it was seen that what exists in all types of failure is a diminished cardiac output relative to the needs of the tissues. This diminished output leads to a conservation of blood flowing through the regional circulations with a relative diminution of the amount supplied to the kidneys. The sequence of events following this shunting of blood from the kidneys is shown in Table 1.

TABLE 1

SEQUENCE OF EVENTS IN HEART FAILURE (FORWARD FAILURE HYPOTHESIS)

1. Reduction in cardiac output, measured by needs of the tissues.
2. Reduction in effective renal plasma flow (20 to 30% of normal).
3. Renal efferent arteriolar vasoconstriction.
4. Disproportionate reduction of glomerular filtration rate (66 to 75% of normal).
5. Increased effective intraglomerular pressure.
6. Increased filtration fraction.
7. Increased absorption of sodium by the tubules.
8. Increased blood volume.
9. Formation of edema in lungs and tissues.

Perhaps it is best for the practicing physician in planning his treatment of the patient in heart failure, to keep both theories in mind, for in the summary of treatment that follows, it is seen that a consideration of all approaches to the problem will involve both points of view.

MODERN CONTROL OF HEART FAILURE

When the treatment of any disease is standardized, measures are usually initiated as routines, with the result that, frequently, the basis for each step undertaken is no longer considered. While such an analytical approach is unnecessary as a rule, the case that does not respond to the customary handling may be clarified if the situation is considered from all angles. Treatment of the failing heart actually is directed to many systems and organs in addition to the heart, and the results of such treatment are effected through a variety of influences. A clear understanding therefore, of what is to be accomplished in the patient with heart failure demands a consideration of the patient as a whole, of the circulation in relation to the rest of the individual, and of all the factors bearing on the failing heart.

With this in mind, it has seemed appropriate in this discussion to break down and resolve in lowest terms, so to speak, what is actually done for the patient in heart failure and then to clarify further under each heading the means by which the objectives are accomplished. We are not concerned with specific dosage or with particular situations. We are subjecting the gamut of cardiac therapy to critical appraisal, with a view to placing the numerous measures undertaken in the proper category according to what they actually accomplish. If, when confronted with a cardiac patient, treatment is undertaken with these factors in mind, the therapy available today is capable of controlling heart failure. A waterlogged cardiac is an improperly treated patient. A dyspneic cardiac is inadequately treated. The fact is that the vast majority of cardiac patients today no longer die in failure. They either suffer an accident — a myocardial infarct or an arrhythmia, or, to use a lately popular phrase, they "just fade away."

If we analyze our methods of treatment, as was described above, we find we are actually attempting to accomplish four objectives simultaneously. These objectives are outlined in Table 2. An analysis of each objective follows in Table 3, 4, 5, and 6.

TABLE 2

CONTROL OF HEART FAILURE

1. Measures directly affecting the heart and increasing its efficiency.
2. Measures reducing the load on the heart.
3. Measures to remove the products of failure and the resulting symptoms.
4. Treatment of complicating factors.

TABLE 3
MEASURES DIRECTLY AFFECTING THE HEART AND INCREASING ITS EFFICIENCY

A. Direct muscle action:
   1. Digitalis.
   2. Quinidine.
B. Indirect muscle action (improving coronary flow or oxygen saturation of the blood):
   1. Xanthines, papaverine, nitrites.
   2. Treatment of shock, tachycardia, etc.—conditions associated with low diastolic pressure and reduced coronary flow.
   3. Treatment of anemia.
   4. Administration of oxygen.
   5. Improvement of pulmonary function.

TABLE 4
MEASURES REDUCING THE LOAD ON THE HEART

1. Decreasing tissue demands.
   A. Directly, by decreasing oxygen demand:
      1. Bed rest.
      2. Small feedings.
      3. Resolution of anxiety.
      4. Control of infection.
   B. Indirectly, by reducing basal metabolism:
      1. Starvation.
      2. Thyroidectomy, thiouracil, radioactive iodine.
2. Decreasing mechanical loads:
   1. Reduction of blood pressure.
   2. Correction of shunts (congenital heart disease, A-V aneurysms).
   3. Relief of obstructions (coarctation of aorta, mitral stenosis).
   4. Correction of obesity.
   5. Decrease diastolic filling pressure or overstretching by venesection and diuresis, or application of tourniquets in emergency.
3. Suppressing harmful reflexes:
   1. Morphine and sedatives.
   2. Antispasmodics.
   3. Maintaining upright posture.

TABLE 5
MEASURES TO REMOVE THE PRODUCTS OF FAILURE AND THE RESULTING SYMPTOMS

A. Reduction of blood volume:
   1. Venesection.
   2. Application of tourniquets.
B. Delivery of edema:
   1. Low-sodium diet.
   2. Diuretics—
      a. Xanthines.
      b. Urea.
      c. Ammonium chloride.
      d. Mercurials.
   3. Thoracentesis.
   4. Paracentesis.
C. Correction of disturbed acid-base balance.

TABLE 6
TREATMENT OF COMPLICATING FACTORS

1. Malnutrition (low serum proteins).
2. Avitaminosis (particularly thiamine deficiency).
3. Disturbed thyroid function (thyrotoxicosis, myxedema).
4. Infection (pneumonia, sepsis, abscess, etc).
5. Pulmonary insufficiency (acid-base balance).
6. Anemia.
7. Obesity.

It is suggested that each case of cardiac failure be analyzed in such a fashion, particularly when the case is not doing well. For example, stubborn failure often will be resolved when unsuspected complicating factors are sought. Also, if some means of reducing the load on the heart cannot be found, return of failure is inevitable when irreversible heart disease exists. Anemia or pulmonary insufficiency may be the cause for a failing myocardium, while the patient masquerades in a bath of edema fluid. Each case invariably presents numerous facets which reflect different situations. When we break down our treatment methods along the lines suggested, we will have the answers as to whether we are bringing to bear on each patient all the possible means of helping him.

CONCLUSION

If one positive fact has emerged from the enormous amount of research done on this subject in recent years, that fact is that heart failure is relative, that there are an infinite number of levels at which failure is or is not present, and that tissue requirements are as fundamental as cardiac efficiency in determining whether or not failure exists. The clinician therefore, should take his cue from this fact, and accomplish his purpose, as much as can possibly be accomplished, by simultaneously raising cardiac efficiency and lowering tissue requirements until a level is reached where a state of compensation, better termed equilibrium, exists. If cardiac efficiency is unable to meet tissue demands, whether they be high or low, failure will persist.

At this point it must be emphasized that our treatment, for the most part, unfortunately is inadequate in restoring equilibrium. We simply remove, in cases responding to treatment, the products of the decompensation as fast as they are formed. Although we thus rid the patient of many of his symptoms, we are not affecting his failure. For example, the waterlogged patient, rid of his edema by salt-free diet and mercurial diuretics, may still be in as severe failure as when he had his edema. We are successful or not in our treatment, depending on whether the rate of accumulation exceeds or is less than the measures we institute to remove it. That is, if we can rid the patient of his retained fluid as fast as he accumulates it, we will prevent those symptoms formerly ascribed to "backward failure" or congestion, from manifesting themselves. When accumulation is more rapid, the reverse results. However, in most instances, our methods succeed and, eventually, the cardiac dies from extreme "forward-failure" — coma from cerebral anoxia, shock from inadequate output, etc., or some arrhythmia, or accident such as infarction.

This realization, however, that we are unable in most instances, to restore the heart to normal, should not deter us from intensive treatment, regardless of the circumstances; for the difference between adequate and inadequate treatment is comfort to the patient and often, many years of useful and enjoyable life.

We may conclude this discussion of heart failure by quoting Stead⁽⁶⁾ who has done so much in recent years to throw light on the mechanisms involved. "In summary, the observations on cardiac output indicate that the signs of congestive failure develop whenever cardiac output is inadequate for the body needs over a prolonged period of time. The absolute value at which the cardiac output becomes inadequate will depend on the needs of the body for blood — but the absolute level of output is of little importance. It is inadequate whenever for a long period of time too little blood is pumped to give the kidneys their normal share."

This then, is the modern interpretation of heart failure. When this understanding becomes the basis of therapy, the control of heart failure will have been achieved. We can then direct our major efforts away from the results of heart disease to the fundamental problems of the causes of heart disease.

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The Prevention of Rheumatic Heart Disease*

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Doctor Stafford emphasizes that rheumatic fever is a leading cause of death in children and of adult heart disease. Regardless of intensive research, little has been added to our knowledge of the disease in sixty years. No specific tests are available to make the diagnosis or to indicate when the disease becomes inactive. He points to the importance of nutritional, endocrine and infective factors in both etiology, prevention and in treatment. After consideration of corticotropin and cortisone he concludes that treatment still remains essentially static.

EDITOR

Rheumatic fever has become one of the leading causes of death in childhood and much of the heart disease seen in adults is the direct result of this disease. Efforts directed toward the prevention of the disease and particularly its severe and disabling complications are well worth while. This is true despite the fact that many of our efforts must be based on facts that are as yet not clearly defined.

Very little is known about rheumatic fever that was not known some sixty years ago. This is true despite the tremendous amount of work that has been done on the disease. McCullough⁽¹⁾, in his presidential address before the American Pediatric Society in May, 1952 said, "The dearth of new facts and the failure to learn more concerning rheumatic fever are due to no lack of action or effort in investigation, and today these efforts continue with great zeal and earnestness by many workers in many fields."

Rheumatic fever affects tissues in vital organs throughout the body but the damage in all organs, excepting the heart, is reversible. As the heart is the most severely and frequently affected it becomes the index to the severity of the disease in the individual patient. Damage to the heart may also be reversible but, in a large number of the patients, scarring results from the healing and the process ends in destruction of the vital elastic and muscle cell tissue.

Rheumatic fever is a difficult disease to study for several reasons. We have no specific test by which a definite diagnosis can be made; the disease varies from year to year; it varies in different age groups and individuals; and, its nature is not entirely known.

Rheumatic fever is a disease of young people and most often the initial attack occurs at about the age of six years. This is the age at which a stable period of growth ends and it is common knowledge that recurrences are less frequent after puberty. These facts would indicate that the disease is somehow affected by the endocrine and metabolic processes of growth. We see the end results of rheumatic fever at all ages but most, if not all, active cases seen in adults are recurrences rather than initial attacks of the disease. Why the disease develops only in young people and why some are affected and others not, is not known. Growth hormones are known to affect the disease and the reason, if understood, would go far to solve the problem.

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*Read before the Nebraska Heart Association, September 27, 1952, Omaha, Nebraska.

We know that rheumatic fever is definitely related to the nutritional state of the paient. It can be shown that a poor nutritional state exists in the rheumatic child before the disease has reached the level of clinical recognition and perhaps even before the actual beginning of the disease. A recent paper by Kahn, Brown and Goldring(2) points out the fact that rheumatic children have fallen behind their expected rate of development as measured by the Wetzel grid, and further, that those children regain their normal percentiles as they recover. These authors suggest that the use of the Wetzel grid may be a way of screening large numbers of children to find those who are rheumatic or possible future rheumatics.

Even though dietary inadequacies are almost always found to have preexisted in children with rheumatic fever this does not help to solve the problem as to why other children on the same diet and in the same environment do not develop the disease. The natural course of rheumatic fever suggests that it was present long before it became clinically evident.

Attacks of rheumatic fever are usually related to the presence of an active streptococcic infection, thought by most workers to be specifically group A, beta-hemolytic streptococcic infection. However, many victims of the disease do not show evidence of streptococcic infection and those that do, reveal no evidence that the tissues are affected directly by the bacteria. Furthermore, no one has proved that the effect on the tissues is due to any of the bacterial products. It is interesting to assume that the disease is initiated by a stress reaction and occurs in individuals who cannot react normally to stress situations. Recent interest and knowledge concerning the adrenal hormones suggest some of the mechanisms that may be at work in the disease. We know that other forms of stress such as extreme cold, fatigue and even emotional stress are capable of initiating an attack of rheumatic fever.

The collagen tissues of the body as well as other tissues, are affected by the disease and it is interesting to postulate that for some reason, the victims of rheumatic fever are unable to form normal collagen from their foodstuffs.

Diagnosis of rheumatic fever in the absence of any specific test depends on such inadequate laboratory tests as the sedimentation rate, white blood count, the presence of anemia and the clinical signs with which we are all familiar. The disease, in this area at least, seldom follows the text-book picture and is usually seen as an insidious, steadily progressive disease of an undramatic nature. Unless the disease is kept in mind it frequently will be missed. If serious complications are to be avoided the disease must be looked for and recognized so that treatment can be started.

The diagnosis and management of rheumatic fever is a problem that requires all the art and science available to the physician. Progression of the heart involvement becomes the measure of the disease and all clinical as well as laboratory means at our disposal must be used to determine the presence or absence of carditis.

Statistically, rheumatic fever is a very important disease. It is estimated that there are many millions of streptococcic infections every year. Many thousands of these will result in initial attacks of rheumatic fever and probably over half of these will develop rheumatic carditis. The prevention of the initial attack of the disease and the prevention of heart complications in those who are victims is a worthwhile aim.

Rheumatic fever is a disease of recurrences and, since these recurrences increase the likelihood of permanent heart damage, it is desirable that they be prevented whenever possible. Recurrences are most likely to occur during the first year after the initial attack. McCue and Gavin(3) found a recurrence rate of sixty-one percent in a series of cases that they followed for a period of three years.

Careful attention to the development and nutritional status of the child by means of the Wetzel grid, or perhaps a less complicated chart, should be helpful in pointing out those children who are candidates for the disease. Careful attention to the diet, removal of infection, and improvement in living conditions should pay dividends in helping to prevent the initial attack of the disease. It is unfortunate that the age at which rheumatic fever is most likely to occur is one that is largely neglected by both the pediatrician and the parents. Infants, as a rule, receive frequent and thorough examinations and their weight and measurements are carefully recorded. This is not generally true in the case of the older children. This group, if they are seen at all in the physicians office, are usually given a superficial inspection of the nose and throat and the parents are advised to have the tonsils and adenoids removed if they are still present. Little attention is given to the development and nutritional status of the patient. Physicians are not entirely at fault as parents are not yet educated to the importance of frequent and thorough examinations of children in this age group. It goes without saying that we would like to improve the nutrition and environment of all children entirely aside from the consideration of rheumatic fever.

Once a streptococcic infection has developed in any child and particularly in those children most likely to develop the disease, or those who are already victims of rheumatic fever, it should have adequate treatment. Penicillin, started early in the infection and given in adequate doses over a period of a week probably is the treatment of choice.

The prevention of streptoccic infections in the known victims of rheumatic fever by means of prophylactic drugs has received wide acclaim and, in the hands of many workers, has proved entirely practical. The latest report is that of Bundy, McCue and Porter(4) who were able to reduce the number of recurrences by using sulfadiazene or gantrisin. Both drugs seem to be equally effective and there were few complications in a large group of patients treated daily with the drugs. The recurrence rate in the treated group was 3.7 percent while it was 61 percent in the untreated group. Frequent laboratory examinations are necessary when the sulfa group of drugs is used in this manner. Urinalysis, hemoglobin determination, sedimentation rate and the white blood count should be done before the treatment is started. The leukocyte count should be determined each week for the first six weeks and at monthly intervals for at least four months. It is then repeated at intervals of three months until the cessation of the treatment. A fall in the leukocyte count below four thousand is an indication to stop the drug and this occurred in six percent of the patients in the group mentioned above.

If complications do occur from the prophylactic treatment it is usually during the first few weeks of medication, so that the number of laboratory examinations is less if the treatment is continued throughout the year. The treatment should be continued until the age of puberty when recurrences become less frequent.

Oral penicillin is equally effective in lessening the number of recurrences but it is more expensive and the drug must be given one half hour before meals. This is frequently inconvenient for school children. Extensive laboratory examinations are not needed if penicillin is used but there may be some danger of producing sensitivity to the drug. The use of large doses of depository type of penicillin at intervals of two weeks is supposed to maintain a satisfactory blood level and its use should be justified under certain conditions.

During the management of every case of rheumatic fever there comes a time when the physician must decide that the disease is now inactive and the patient is able to resume supervised activity. This is one of the most important and difficult decisions in medicine and we are again handicapped by the lack of a specific test for determination of activity. We must rely on our clinical judgment and the laboratory tests that are all well known to us. We must always remember that rheumatic fever can be active below the threshold of all clinical and laboratory tests.

Much harm can be done by arbitrary enforcement of bedrest and inactivity in a child beyond the time that is actually necessary. The mental crippling that results can far outweigh the severity of the cardiac damage. It would seem that the tendency in pediatric thinking is moving toward accelerated rehabilitation of these patients. Simon, Black and Rosenblum(5) have instituted such a program in their patients without obvious harm but they are able to follow them very closely both clinically and in the laboratory.

The final answer concerning the use of ACTH and cortisone in acute rheumatic fever is not known. It seems that the use of such powerful hormones should be reserved until it has been proved that they are lifesaving. If they are used, it must be under strictly controlled conditions and only if carditis is present. It must be remembered that the sense of well-being which occurs in patients being treated with these agents may act much as morphine does in acute appendicitis. Further, these hormones increase the susceptibility to bacterial infections. Dorfman(6) and his group conclude that ACTH therapy in rheumatic fever represses the manifestations of the disease including the carditis. However, there is as yet no evidence as to whether or not it affects the course of the disease. Aspirin remains the drug of choice until further series of controlled cases are reported.

SUMMARY

Prevention of rheumatic heart disease depends upon prevention of the initial attack of the disease if possible, and the prevention of recurrences after the patient is a known rheumatic victim. Since poor nutrition is preexistent in rheumatic fever, it should be possible by means of suitable developmental and nutritional charts to determine which children are likely to develop the disease. Children falling below their expected levels should have their nutritional and environmental status improved. They should be protected against streptococcic infections. Prophylactic treatment by means of drugs against recurrences of the disease is entirely practical and should be used in the known rheumatic until the age of puberty. Aspirin remains the drug of choice in the treatment of acute rheumatic fever. The use of ACTH and cortisone is not warranted at this time except perhaps in the treatment of established carditis.

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The Present Status of Cardiovascular Surgery

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Doctor Walske presents an epitome of the cardiac conditions now amenable to surgical correction, and thus to relief of symptoms, increased comfort, activity and longevity. He has included certain vascular abnormalities; has briefly outlined the surgical approach; and, has furnished clear illustrations that assist in understanding both the condition and its correction.

EDITOR

Progress in surgery, as in other fields of medicine, has not always been continuous. Since the time of Hippocrates there have been long periods of indifference and at times retrogression in medical thinking. It was not until the last half of the nineteenth century that real progress became evident. On closer study it becomes obvious that the various gains in clinical medicine have paralleled the even more remarkable advances in the allied basic sciences. Surgeons for centuries confined their efforts mainly to the exposed body surfaces and to amputations. The nineteenth century saw the successful surgical attack on diseases of the abdominal viscera and the turn of the century established surgery for diseases of the intracranial contents as a rational undertaking.

Only the thoracic cavity remained as a relatively uninvaded portion of the human anatomy. Earlier attempts meeting with failure undoubtedly contributed heavily to the lack of enthusiasm for surgical attack on the intrathoracic organs. A better understanding of the cardiopulmonary dynamics gave rise to a renewed interest in thoracic surgery some two decades ago. A series of successes in the treatment of pulmonary diseases in turn gave rise to a renewed interest in the surgical management of cardiovascular abnormalities. The advances in cardiovascular surgery during the past fifteen years have been so numerous and so gratifying that an evaluation of its status appears appropriate. No attempt will be made to present detailed diagnostic criteria or specific steps in the recommended surgical measures. It is, however, the author's purpose to place emphasis upon those cardiovascular abnormalities that may be materially benefited by surgical procedures. A heavy responsibility lies upon general practitioners, pediatricians and internists who are first to see these cardiovascular abnormalities. By proper diagnosis and evaluation, many previously untreatable patients can now be given a new lease on life by proper surgical treatment.

For the purpose of discussion, the various cardiovascular abnormalities can be best grouped into the congenital and acquired types. The conditions which can be corrected or benefited by surgical measures are listed below:

CONGENITAL

1. Patent ductus arteriosus
2. Coarctation of the aorta
3. Tetralogy of Fallot
4. Pulmonary valve stenosis
5. Tricuspid atresia
6. Interauricular septal defects
7. Interventricular septal defects
8. Aortic vascular rings
9. Transposition of the great arteries
10. Pulmonary arteriovenous fistula

ACQUIRED

1. Constrictive pericarditis
2. Acute cardiac tamponade
3. Mitral stenosis
4. Mitral regurgitation
5. Aortic stenosis
6. Coronary insufficiency
7. Pericardial and myocardial tumors
8. Aneurysms of the aorta and its branches
9. Foreign bodies and wounds of the heart

PATENT DUCTUS ARTERIOSUS

In fetal life the atelectatic state of the lungs demands but a small functioning pulmonary vascular bed. Nature provides the ductus arteriosus as a shunt from the lesser to the greater circulation to permit unimpeded flow of blood. With birth the lungs expand, the functioning vascular bed increases tremendously and the short-circuiting action of the ductus arteriosus is no longer required. Christie(1) has shown that the ductus arteriosus is closed in 95 per cent of infants by the twelfth week and in 99 per cent of infants by the end of the first year. Less than 1 per cent persist as patent structures into childhood and adult life. Obliteration of the ductus arteriosus is normally dependent upon a degenerative process in the vessel wall and not upon thrombosis of its lumen.

When the ductus arteriosus remains open beyond the second year of life, an arteriovenous type of fistula results. The flow of blood is now reversed since the aortic pressure exceeds that in the pulmonary artery. If superimposed infection does not become a problem, the incapacitation is in direct ratio to the size of the fistula. A patient with a very small shunt may go on to advanced age without any gross evidence of cardiac disease, while a patient with a large shunt may show decreased exercise tolerance in childhood and decompensation in early adult life. Those having an appreciable shunt will also show retarded physical development on the basis of deficient peripheral circulation. A third and very serious complication is that of a superimposed endarteritis beginning at the site of the shunt and usually caused by the Streptococcus viridans organism. Keyes and Shapiro(2), in a study on prognosis, showed that patients with patent ductus arteriosus reaching seventeen years of age had a life expectancy about one-half that of the population as a whole. In most instances the finding of a harsh, continuous, machinery-like murmur and a thrill in the second left interspace will make the diagnosis. With larger shunts, varying grades of left heart strain, a high pulse pressure and a "hilar dance" on fluoroscopy will be noted. Cardiac catheterization aids in the diagnosis but is not essential.

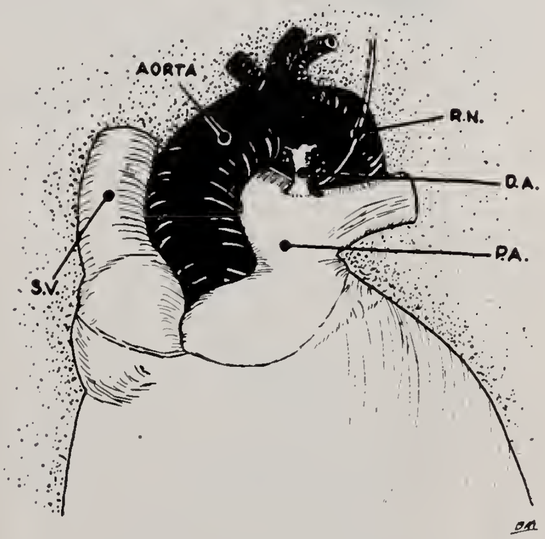

Fig. 1. Patent ductus arteriosus.

Gross(3) in 1938, was the first to successfully ligate a patent ductus arteriosus. The procedure has now become standardized to two acceptable methods, namely, suture ligation and ligation with division. The latter appears to be the better in most instances, since recanalization is less likely. Surgical interference early in childhood is recommended to avoid the complications of this disorder and to permit the surgeon to work with the more elastic structures found at this age. The mortality rate in the hands of a qualified surgeon is less than for many other major operative procedures. Scott(4) refers to a mortality rate of less than 0.5 per cent in a large group of asymptomatic children and an overall mortality rate of 2.5 per cent. He also points out that this overall mortality rate can and should be lowered in the future. A patient with patent ductus arteriosus that has been surgically treated can expect to lead an entirely normal life with no reduction in his longevity. It is, therefore, paramount, that we as physicians, make surgical treatment available to all patients afflicted with this disorder.

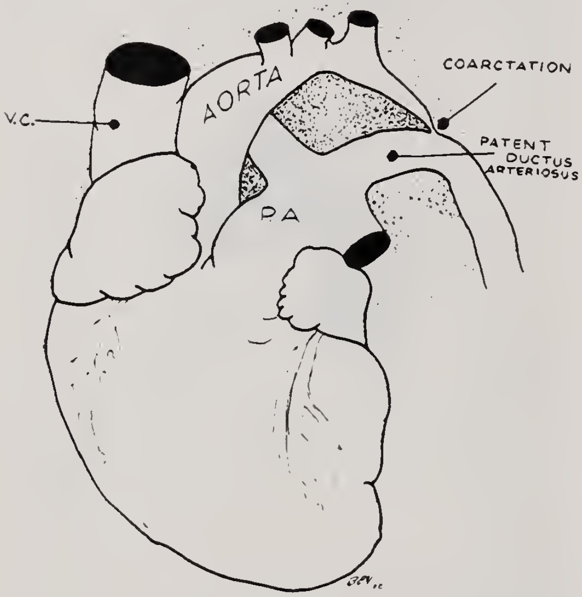

Fig. 2. Infantile type of aortic coarctation.

COARCTATION OF THE AORTA

Coarctation refers to a narrowing or complete obstruction of the aorta. Although not clearly understood, it is classified as a congenital lesion. The etiology likewise is not clearly understood; however, reasonable evidence is available that in most instances the degenerative changes noted in the obliterative process of the ductus arteriosus is continued into parts of the aorta. This anomaly is noted about once in every 1,000 or 1,500 routine autopsies. Coarctation of the aorta has generally been considered to be of two types, infantile and adult. The infantile type usually consists of a long coarctate segment involving the aortic arch proximal to its junction with the ductus arteriosus. The ductus arteriosus is usually found to be patent and other major cardiac defects are the rule. Most patients with this type of coarctation fail to survive neonatal life. On the other hand, the adult type of coarctation of the aorta usually consists of a short coarctate segment at or just beyond its junction with the ductus arteriosus. In a small percentage of cases the abnormality may be found at lower levels.

The diagnosis is usually easy. Few, if any, symptoms are present in early life. Hypertension in the upper extremities with hypotension in the lower extremities, especially when associated with absence of abdominal aortic pulsation, are about all that are necessary to make the diagnosis. The usual complaints of arterial hypertension and of intermittent claudication in the lower extremities are often heard. At times a cerebro-vascular accident may be the first clue that all is not well. A systolic murmur over the base of the heart or in the mid-back region is often heard. Diastolic murmurs may be heard in both areas; however, if heard anteriorly an associated patent ductus arteriosus should be seriously considered. The presence of intercostal pulsations and notching of the ribs indicate development of substantial collateral channels and aid in making the diagnosis. Angiocardiography will locate the site of the constriction but is not essential in making the diagnosis.

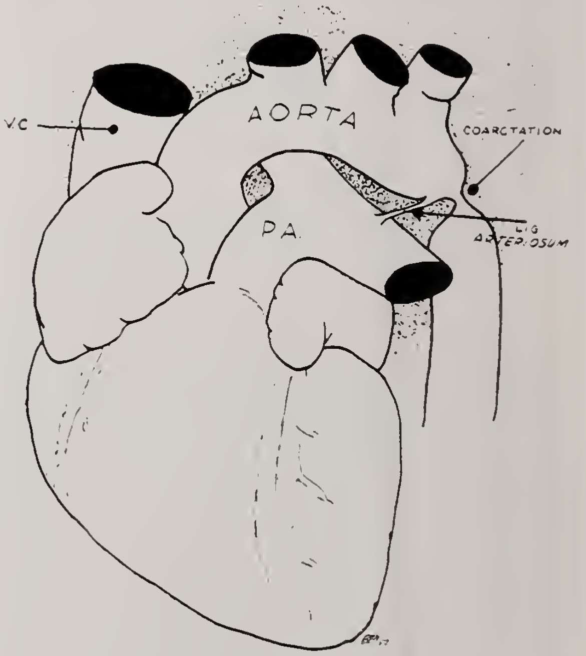

Fig. 3. Adult type of aortic coarctation.

The prognosis in patients with coarctation of the aorta is that of a shortened life. Abbott⁽⁵⁾ made reference to 142 autopsy cases with an average life of 32 years. Reifenstein, Levine and Gross⁽⁶⁾ found that 61 per cent died before completing their fortieth year. Cerebrovascular accidents are common and rupture of the aorta may occur. Sub-acute bacterial endarteritis may also occur in the narrowed segment. Myocardial failure is responsible for death in many of the older patients.

Crafoord⁽⁷⁾ in 1944 and Gross⁽⁸⁾ in 1945, each working independently, were the first to excise the coarctate segment and restore continuity with end to end anastomosis. This procedure will satisfy the need in most instances; however, occasionally the segment excised is of such length that end to end anastomosis is impossible. In this case the left subclavian artery may be apposed to the distal aorta as advocated by Blalock and Park⁽⁹⁾ or a fresh or preserved arterial graft may be used to bridge the gap as advocated by Gross⁽¹⁰⁾. With continuity restored a patient may look forward to a normal life and longevity. It appears that the best age for operation is between six and fifteen years. At this time of life the aorta approaches adult size and the growth factor becomes less of a problem. It is also in this period of life that no degenerative process has set in and the vessel can be most safely sutured. Although patients over forty years of age have been operated upon, the hazard of the procedure is extremely great in patients beyond age thirty. The overall mortality rate is somewhat under ten per cent and should decrease markedly with earlier treatment. The dividends from surgical treatment of coarctation of the aorta are great and should be enthusiastically recommended in all but the older age group.

TETRALOGY OF FALLOT

A congenital cardiac anomaly characterized by cyanosis and four basic anatomical variations was first described by Fallot⁽¹¹⁾ in 1888. The four variations are pulmonary stenosis, dextroposition or overriding of the aorta, high interventricular septal defect and hypertrophy of the right ventricle. The tetralogy of Fallot is the most common abnormality in the group of congenital anomalies associated with cyanosis. The prognosis in this group of patients, if not treated, is grave. Many do not survive childhood and only a few go on into mid-adult life.

Taussig⁽¹²⁾and others have gone into considerable detail on the diagnostic features of this abnormality. Classical symptoms are usually those of diminished exercise tolerance, squatting and retarded growth. In addition to cyanosis, the physical findings usually includes a systolic murmur in the pulmonary area and along the left sternal border, a loud aortic second sound and a weak pulmonic second sound, a small heart and clubbing of the digits. Arterial oxygen saturation may be as low as 25 per cent but varies from 60 to 75 per cent in most cases.

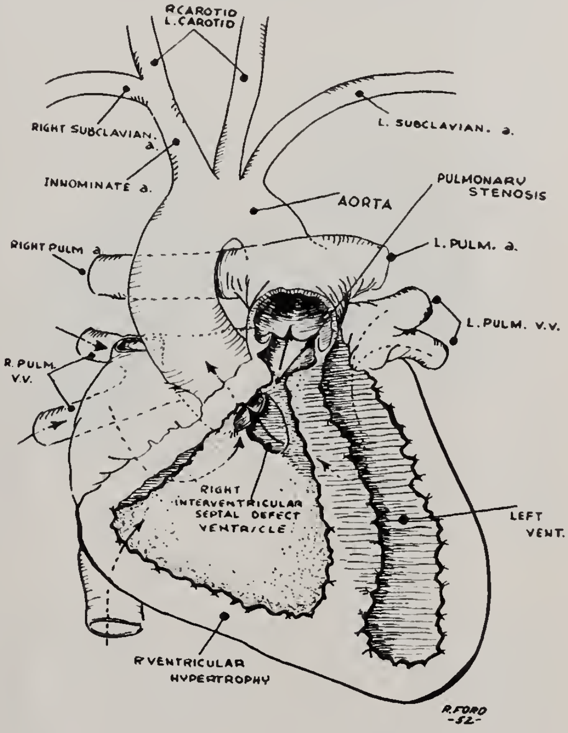

Fig. 4. Tetralogy of Fallot.

A polycythemia of 6 to 9 million is common. Radiography will show a concavity in the region of the pulmonary conus and diminished size and pulsation of the pulmonary arteries. The electrocardiogram will show a right axis deviation. Angiocardiography and cardiac catheterization are invaluable in supplying more detailed information.

Doyen⁽¹³⁾ in 1911 was the first to attempt operative treatment of pulmonic stenosis. He made an effort to divide the valve with a tenotome but was unsuccessful. Blalock⁽¹⁴⁾ in 1944 performed the first successful systemic-pulmonary anastomosis in man. His method provides for use of one of the branches of the aortic arch in the anastomosis to one of the pulmonary arteries. Potts⁽¹⁵⁾ in 1946 employed a method of direct anastomosis between the side of the aortic arch and the side of the pulmonary artery. Brock(16) and others have been of the opinion that it may be better to correct one of the existing defects than to create a fifth abnormality. He recommends direct attack on the pulmonary stenosis in many instances, that is, infundibular resection. This, in principle, is essentially what Doyen attempted to accomplish in 1911. All three methods referred to are effective in improving the state of the circulation; however, none restores a normal circulation. To date, the direct attack on the pulmonary stenosis has met with a rather high mortality rate (29 to 33.3 per cent)(16, 17) but it is believed that this will decrease with additional experience. The method devised by Blalock is most commonly employed and in most instances is satisfactory. In a recent report Taussig and her associates reviewed the results of the first 1,000 cases operated upon at the Johns Hopkins Hospital(18). The results were classified into four groups: (1) good 78.1 per cent; (2) fair 3.7 per cent; (3) unimproved 2.6 per cent; and (4) dead 15.6 per cent. It is to be noted that many of the patients operated upon were extremely ill. The results in this large series of cases speaks for itself and one could hardly deny a victim of this anomaly an opportunity for surgical treatment.

PULMONARY VALVE STENOSIS

This abnormality refers to the isolated pulmonary valvular stenosis with intact interventricular septum. This condition is associated with a patent foramen ovale or a defect in the interauricular septum in about seventy per cent of the cases. The pulmonary valve cusps are usually fused into a domelike structure with a small perforation in its center which gives rise to a jet-like action of the blood. It is believed that this jet-like action is responsible for the post-stenotic dilatation of the pulmonary artery which at times may reach several times its normal caliber. In those cases with a patent foramen ovale or interauricular septal defect there will be varying degrees of cyanosis depending upon the degree of right to left shunt. The right ventricle hypertrophies tremendously due to added strain and, in the presence of appreciable shunt, the left ventricle may also show hypertrophy.

The diagnosis is not too difficult and, usually can be made on routine clinical work-up. Exercise tolerance is materially reduced. Physical examination will show a precordial heave, cardiac enlargement primarily to the right and a precordial systolic murmur and thrill. The second pulmonary sound is soft. The liver may show enlargement and may actually pulsate. With associated patent foramen ovale or interauricular septal defect, there is cyanosis, clubbing of the digits and polycythemia. The electrocardiogram will show evidence of right ventricular hypertrophy. Radiography will show cardiac enlargement mainly of the right ventricle, marked prominence of the pulmonary artery and decreased vascularity of the lung fields. Angiocardiography and cardiac catheterization, although usually not necessary, will more accurately confirm the diagnosis.

The first attempt(13) at surgical treatment of pulmonary stenosis has been alluded to previously. Brock's first report(19) on pulmonary valvulotomy appeared in the literature in 1948. Sellors(20), who performed a similar operation, also published a report in 1948 and perhaps should get credit for the first successful operation. The procedure consists of passing a valvulotome through the right ventricular musculature and up through the pulmonary valve. This is followed by a dilator to further increase the diameter of the aperture. The regurgitation which results does not appear to be deleterious. Sabiston and Blalock(21) report a series of sixty-one cases with excellent results. There were eight deaths or an overall mortality rate of thirteen per cent; however, four of the eight deaths were in patients with associated additional lesions. From data that is now available, the procedure of valvulotomy for isolated pulmonary valve stenosis is to be enthusiastically recommended.

TRICUSPID ATRESIA

Tricuspid atresia is not compatible with life unless associated with an interauricular septal defect and a patent ductus arteriosus or some other anomalous blood supply to the lung. The infants that survive birth usually have earlier and more severe symptoms than the infants with the tetralogy of Fallot. The differential diagnosis is dependent upon the finding of an enlarged left ventricle on x-ray film and evidence of left ventricular hypertrophy and left axis deviation on the electrocardiogram. The basic problem of inadequate blood flow to the lungs is the same for tricuspid atresia as it is for the tetralogy of Fallot. The requirement, therefore, is to increase pulmonary blood flow and this can be best accomplished by producing an adequate aorta-pulmonary artery shunt. This may be provided by the Pott's type operation in infants or by the Blalock type operation in the older age group. Division of the atretic tricuspid valve is not applicable in that the right ventricle is a nonfunctioning rudimentary type of organ. Although no large series of cases have been collected, the results from operative intervention to date are good and the procedure should be recommended whenever the diagnosis is made.

INTERAURICULAR SEPTAL DEFECTS

The size of the defect varies greatly and consequently the symptoms will vary accordingly. The most common complaints are those of exertional dyspnea, cough, palpitation. Cyanosis occurs more commonly after physical exertion. Cause of death is congestive heart failure in most cases. The physical findings also vary greatly. The heart may be enlarged. A systolic murmur sometimes accompanied by a thrill, is frequently heard in the third left interspace, and the pulmonic second sound is often accentuated. Radiography shows enlargement of the right auricle and ventricle in cases with large defects. The pulmonary artery is usually enlarged and the pulsations in the pulmonary artery and its branches are increased. Angiocardiography contributes little to the diagnosis. The electrocardiogram shows a right ventricular hypertrophy in many instances. Cardiac catheterization aids considerably in confirming the diagnosis.

Various attempts have been made to close these defects. Murray(22) has recommended through and through suturing with fascia lata in the septal plane to close or narrow the defect. Other attempts have been made by inversion of both auricular appendages into the defect or by the placing of a plastic prosthesis in the defect. The most rational approach to this problem appears to be that of Gross(23) who has devised a funnel which may be attached to an auricle and the defect then repaired by direct suture or by the use of a graft through the well of blood in the funnel. The loss of blood is minimal and the repair can be accomplished in a liesurely manner since the flow of blood is not disturbed. This method appears to be sound and can be accomplished with minimal risk to the patient.

INTERVENTRICULAR SEPTAL DEFECTS

Defects in the interventricular septum are quite common among the congenital anomalies. These defects often produce few symptoms. Cyanosis usually occurs late and then generally as the result of heart failure or pulmonary infection. On physical examination a loud, harsh, systolic murmur is heard more clearly in the left third or fourth interspace but is transmitted widely. The murmur is usually accompanied by a systolic thrill. Radiography contributes little; however, if the septal defect is high there is increased pulmonary flow and a resultant enlargement of the pulmonary artery as well as increased amplitude in its pulsation. Angiocardigraphy is not very informative and the electrocardiogram is usually normal. Cardiac catheterization will aid considerably in confirming the diagnosis. Closure or reduction in size of the defect has been attempted by the method of Murray(22) but, in general, is considered too hazardous. More satisfactory techniques will necessarily require the use of a satisfactory extracorporeal circulation.

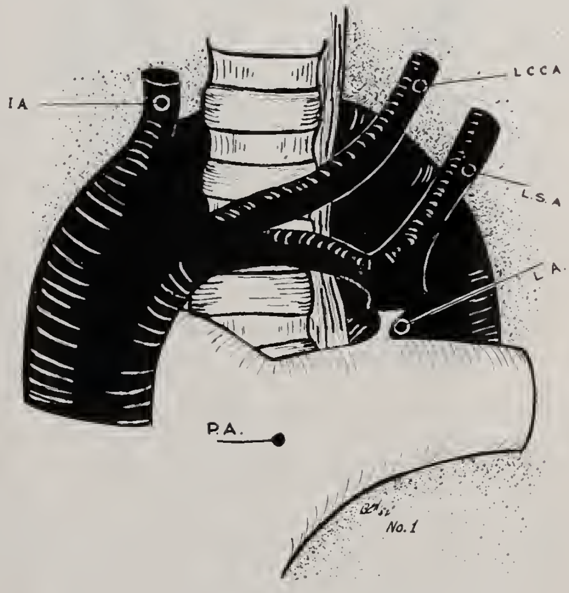

Fig. 5. Constricting ring formed by anterior and posterior aortic arches.

AORTIC VASCULAR RINGS

Variations from normal in the obliteration of the various fetal vascular structures may produce constricting rings about the esophagus and trachea. This may occur when both posterior and anterior arches remain, when a posterior arch and a ligamentum arteriosum complete the ring or when an anomalous right subclavian artery arises from the left side of an anterior arch and courses to the right and posterior to the esophagus and trachea. Arken[24], in 1926, was the first to describe the double aortic arch. Symptoms consisting of difficulty in swallowing and difficulty in breathing are most often present from birth and should make the diagnosis providing the condition is kept in mind. An esophagram will demonstrate the compression. Division of the lesser arch, ligamentum arteriosum or anomalous right subclavian artery at its origin will completely correct this condition. Gross[25] receives credit for first successfully dividing the lesser arch in 1945.

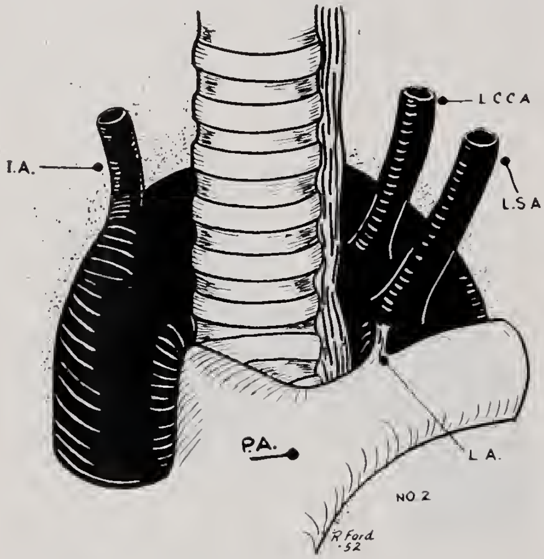

Fig. 6. Constricting ring formed by posterior aortic arch and ligamentum arteriosum.

TRANSPOSITION OF THE GREAT ARTERIES

This means that the aorta arises from the right ventricle and the pulmonary artery from the left ventricle and therefor implies that there are two separate circulations. This set of circumstances obviously would not be compatible with life unless one or more of the following communications are also present: (1) patent foramen ovale; (2) interauricular septal defect; (3) interventricular septal defect; (4) patent ductus arteriosus; (5) partial transposition of the pulmonary veins. The chance for survival with complete transposition is exceedingly poor. In 123 collected cases[26] the average survival was nineteen months.

Infants with transposition of the great arteries are cyanotic from birth. The heart shows enlargement of both ventricles. Murmurs and thrills are present but not diagnostic. Radiography provides the best diagnostic evidence in showing a very narrow shadow cast by the great vessels and increased vascularity of the lung fields. The electrocardiogram may show right axis deviation. Polycythemia is marked. Cardiac catheterization will add little to the diagnosis; however, angiocardiography is often diagnostic.

Treatment[21] has followed several paths of endeavor; namely, (1) construction of extracardiac shunts; (2) creation of interauricular septal defect; (3) creation of an interauricular septal defect with an extracardiac shunt; and (4) creation of an interventricular defect. The creation of an interauricular septal defect appears to yield the best results; however, the mortality rate is high and the result in some survivors is not too remarkable. The only reasonable approach to this problem appears to be the restoration of each vessel to its own chamber; however, this will require the use of a satisfactory extracorporeal circulation.

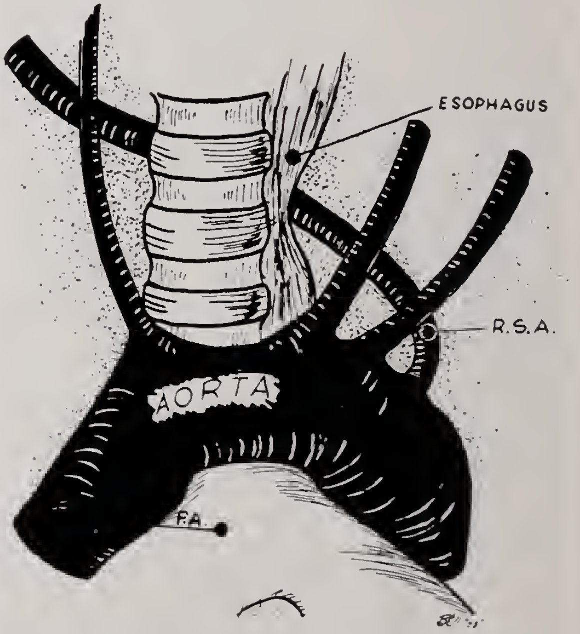

Fig. 7. Constricting ring formed by anterior aortic arch and anomalous right subclavian artery.

PULMONARY ARTERIOVENOUS FISTULA

This condition amounts to a shunt between the pulmonary artery and the pulmonary vein. They may be single or multiple, are believed to be of congenital origin and are to be compared to cavernous hemangiomata elsewhere. Cases have been reported in the newborn but clinical evidence is more likely to appear after puberty. This perhaps is due to the gradual increase in the shunted blood as the lesion grows. Bisgard(27) has suggested that cyanosis does not occur until at least twenty-five per cent of the blood is shunted from the pulmonary artery to the pulmonary vein.

Clinically the condition is characterized by cyanosis, polycythemia, clubbing of the digits and a characteristic x-ray picture. The film will show one or more areas of increased density; these densities will be seen on fluoroscopy to pulsate. Bruit may be heard over the density. Hemoptysis is common and the usual cerebral symptoms of increased blood viscosity are present. The heart is usually normal in size. The more severe cases invariably die from the disease if not treated.

Treatment consists in excision of that portion of the lung that contains the fistula. Pulmonary tissue is to be spared for other areas of the lung may be involved and subsequent resections required. The results following resection are good; however, more than one operation may be necessary.

CONSTRICTIVE PERICARDITIS

Constrictive pericarditis is nearly always the end result of some form of acute pericarditis. The acute stage may have occurred many years before the onset of symptoms and is often overlooked. Many causes have been suggested and at one time rheumatic fever was considered the most common offender. It has now become evident that infection perhaps plays the greatest part in the etiology. It is believed that nearly one-third of the cases are due to the tubercle bacillus and the majority of the remaining cases, to pyogenic organisms. Hemorrhage into the pericardial sac has also been considered as a possible cause of constrictive pericarditis. Cases have developed after trauma with no other evidence obtainable as a cause.

The pathological process of constrictive pericarditis is about the same as for constrictive pleuritis. Effusion is followed by the deposition of fibrin of varying thickness which then undergoes organization. This organized fibrin then progressively contracts, as all scar tissue is prone to do, and thereby limits the function of the heart.

Clinically the disease is characterized by Beck's triad of chronic tamponade which consists of a silent heart, a rising venous pressure and ascites. The systolic blood pressure may be lowered somewhat but a relatively high diastolic pressure remains (low pulse pressure). The patient compensates for the progressive constriction by a rising venous pressure, rising pulse rate and by progressive limitation of activity. When these compensatory measures are exhausted, circulatory failure ensues.

Treatment consists in surgical removal of a substantial portion of the constricting tissue. Delorme(28) was the first to advise pericardiectomy and Rehn(29, 30) was the first to perform a partial pericardiectomy for constrictive pericarditis. Mobilization and permanent release of the left ventricle from the constricting scar appears to be the most important part of the procedure; however, both chambers are cleared as completely as possible within the limits of exposure. It has been shown that the decortication need not be thorough in the region of the auricles and vena cavae. The results are gratifying in that complete rehabilitation occurs in most instances.

ACUTE CARDIAC TAMPONADE

Acute cardiac tamponade refers to a more or less rapidly developing compression of the myocardium. This most often occurs in extensive effusion secondary to acute pericarditis or secondary to wounds of the heart where blood fills the pericardial sac. It is characterized clinically by Beck's triad of acute tamponade which consists of a silent heart, a rising venous pressure and a falling arterial pressure. The patient is acutely ill and fails rapidly. The condition becomes an emergency and demands immediate treatment. Whether due to effusion or hemorrhage into the pericardial sac, an immediate pericardicentesis is in order. In some instances of effusion, especially if purulent, an open type of drainage is to be preferred. In the cases due to hemorrhage into the pericardial sac where repeated aspiration is necessary, exploration and repair of the myocardium or control of the bleeding point becomes mandatory. In many instances a penetrating wound of the heart will require no more than one or two aspirations of the pericardial sac.

MITRAL STENOSIS

Mitral stenosis is the most common complication of rheumatic fever. It is estimated that there are as many as a million persons in the United States suffering from this dis-

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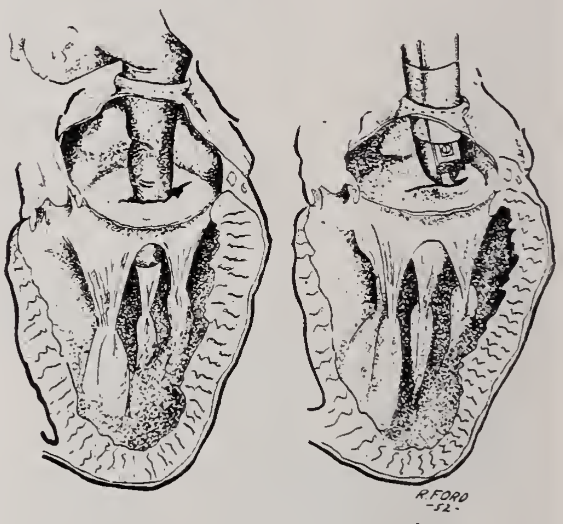
ease. In most cases of rheumatic valvulitis there is first noted minute vegetations which occur along the line of valve closure. That means that they are found on the free edge and for a short distance toward the base of each cusp. The trauma of valvular closing undoubtedly plays a great part in the development of the basic lesion in that location. A secondary area of fibrosis may be found in the region of the annulus at the base of the valve cusp. The vegetations and the surrounding inflamed tissue are eventually replaced by fibrous tissue and a "freezing" of the valve in a state of partial closure eventually results. Calcification by tiny flecks or even large plaques will eventually occur. The end result is that of a slit-like, rigid valve orifice. One would expect considerable regurgitation in this type of valve; however, Bailey(39) was able to confirm noticable regurgitation in only 136 of 501 operated cases or 27.1 per cent of the total. The clinical features of mitral stenosis are well known.

Brunton(32) in 1902, recommended lengthening the mitral slit in mitral stenosis. Cutler in 1924(33), devised a method of incising the stenotic valve. In that the incision was not accurately placed, it resulted in a mitral insufficiency and a worsening of the preoperative state. In 1925, Souttar(34) "dilated" a mitral valve orifice with great postoperative improvement in the patient's condition. From present day experience it must be assumed that the "dilatation" brought about a separation at the commissures. In 1946, Bailey(35) repeated the Souttar operation. The patient died two days later and at autopsy it was noted that the commissures of the mitral valve had been accurately split. In 1948, Bailey(35) successfully incised a mitral valve commissure in a living patient. The general experience in large series of patients to date would indicate that the digital method of Souttar with or without aid of commissural incision is the procedure of choice. The experiences with 706 patients operated upon for mitral disease have recently been reported by Bailey(31). In 632 the primary reason for the operation was mitral stenosis. The postoperative results are indeed encouraging and the overall mortality rate can be held well below the 10 per cent level. In early cases of mitral stenosis it is estimated that the operative mortality rate can be reduced to one per cent. It is the opinion of Bailey(31) that all patients with a clear-cut diagnosis of mitral stenosis should come to surgery long before the compensatory processes have been exhausted. He states(31) that "the pathologic changes are much farther advanced than the early symptoms would suggest."

MITRAL REGURGITATION

Mitral insufficiency may occur in the rigid open type of valve orifice often associated with mitral stenosis or with a large flexible valve with a dilated atrioventricular ring. The latter may be referred to as valvular dysfunction and perhaps need not be associated with rheumatic fever. The clinical features of mitral regurgitation are well known and will not be referred to.



a. b.

Fig. 8. (a) Finger fracture; (b) Commisurial incision.

In 1951, Bailey and others(36) reported a method of treatment which provided valvular tamponade by means of a pedicled flap of pericardium. This method was effective; however, the prohibitive mortality rate of 34.5 per cent(31) made necessary a search for another method. He chooses to call the new method "mitral suturing." This procedure provides for the suturing together of the lips of the incompetent portion of the valve with living suture. Either pericardium or an inverted vein are entirely satisfactory for this purpose. Since it is difficult to tie a knot within a beating heart, the "hangman's noose" principle is used to tighten the suture. The free end of the suture is brought out, either through the opening in the atrium or ventricle, and secured at that point. Bailey(31) reports twenty-two cases with four operative and one late death. Remarkable improvement was noted in the surviving patients. Still another method, that of valvular suspension, has been devised recently by Bailey and others⁽³¹⁾. This, in effect, amounts to creating an artificial chorda tendinea to encourage valvular approximation. Only three cases had been done at the time of the report with excellent results in each.

AORTIC STENOSIS

Aortic stenosis may now also be included among the cardiovascular conditions amenable to surgery. Reference is made particularly to the stenosis that follows rheumatic fever. The valve edges are fused in much the same manner as in mitral stenosis due to rheumatic fever. The cases of stenosis due to arteriosclerosis and those of congenital origin do not fall into this group.

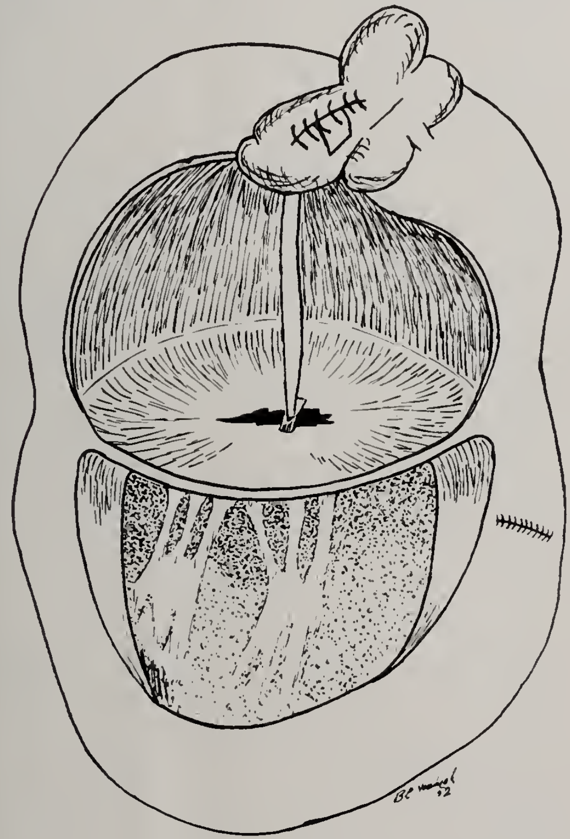


Fig. 9. Mitral suturing.

Treatment can be considered satisfactory only when regurgitation does not occur as a result thereof. Regurgitation promptly makes the condition worse and a fatality is certain. Tuffier⁽³⁷⁾ in 1913 digitally dilated a stenotic aortic valve through a flaccid ventricular wall by simple invagination. Although this method is not to be recommended, it met with success in his case. A report of Bailey and others⁽³⁸⁾ refers to a case in which the aortic valve was cut, producing regurgitation and immediate death. He also refers to the danger of creating a false passage by retrograde dilatation by way of the right carotid artery. Bailey and others⁽³⁹⁾ now report 20 cases of mechanical dilatation of the stenotic aortic valve by means of an instrument passed through an opening in the left ventricular wall. There was an 18.1 per cent mortality in the first eleven cases. The instrument was then improved and the nine cases treated by dilatation since that time have all survived. Mitral valve commissurotomy was also done simultaneously in six of the nine last cases. The results have been gratifying and it is recommended that when both lesions are present they be treated at the same operation. Should the treatment of one lesion be delayed, death may occur from it in the interim between operations. Although rheumatic aortic stenosis is much less frequent than that of the mitral valve, early results of this new operation indicate that the benefits will be fully as great as with the mitral procedure.

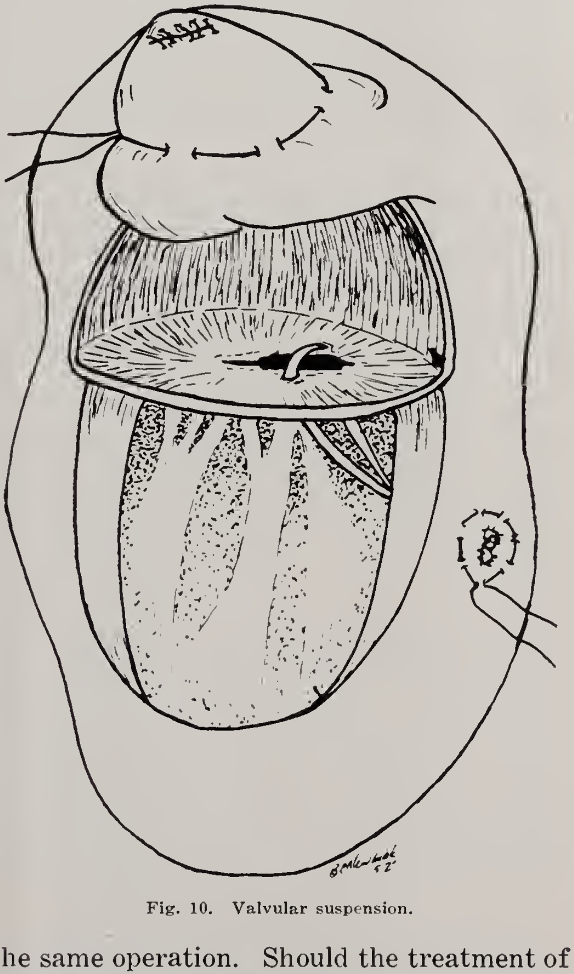


Fig. 10. Valvular suspension.

CORONARY INSUFFICIENCY

Arteriosclerotic disease of the heart undoubtedly is the most common single cause of death. It therefore prompts active research for procedures which may improve the condition. C. S. Beck has been among the most tireless workers in this field of endeavor. Various attempts have been made in the grafting of vascularized tissues such as pectoralis major muscle and the omentum to the myocardium. Powdered asbestos and other irritants have also been placed in the pericardium to create vascularized adhesions. There appears to be little doubt that many patients were benefited by these procedures; however, not sufficiently to warrant general acceptance. Vineberg(40) has shown that a mobilized internal mammary artery whose free end is imbedded in the left ventricular musculature will develop branches which communicate with branches of the coronary artery. This method may prove to be of value.

Beck has for the past few years done much experimental work on arterialization of the coronary sinus and has recently reported on more than 80 clinical cases(41) where this procedure was used. In a series of 28 patients operated upon since December 1950, there has been a mortality rate of 18 per cent. The mortality rate obviously has been high, although not entirely prohibitive, when the excellent results of survivors and the relative prognosis of the untreated patients are considered. This arterialization is accomplished by the use of a venous graft between the aorta and the coronary sinus. The coronary sinus is then partially occluded near its orifice at a second stage operation three or more weeks later by means of a suture which was loosely placed at the first operation. This permits the smaller branches of the coronary sinus to thicken in the interim so that they may better withstand the arterial pressure after the ligation. If the ligation were to be done at the first stage, myocardial infarction would commonly occur. This accomplishes vascularization of the myocardium by retrograde flow and appears to be a rational procedure. It appears that in the hands of experts such as Beck, the procedure could well be recommended in selected cases.

Flothow(42) has reported good results in fifty-two cases of angina pectoris that were treated by sympathetic nerve interruption. There is evidence that both pain and decompensation are relieved by this procedure. It appears that sympathectomy should be given further trial and, at least for the present, should be considered one of the means of treating coronary insufficiency.

PERICARDIAL AND MYOCARDIAL TUMORS

The great majority of tumors of the heart are metastatic and therefore not amenable to treatment. The primary tumor is fortunately rare. Tumors of the pericardium, if benign, are easily dealt with in that loss of the pericardium poses no great problem. Tumors of the myocardial wall, unless superficial and benign, are in most cases not resectable. There is, occasionally, a fibromyxomatous or myxomyomatous tumor of the auricular septum which, in many instances can be removed. A finger can be inserted through the auricular appendage and the tumor separated from the septum by blunt dissection, or, if necessary, with aid of the commissurotomy knife. The loose tumor mass can then be removed through an incision in the superior pulmonary vein. Intra-auricular thrombi can be satisfactorily removed in a similar manner.

ANEURYSMS OF THE AORTA AND ITS BRANCHES

Aneurysms, regardles of etiology, remain a difficult problem and in spite of recent advances are not too often satisfactorily treated. Various procedures have been devised and generally they can be grouped under three headings: namely, (1) those that are designed to promote fibrosis or thrombosis, (2) endo-aneurysmorrhaphy, and, (3) extirpation of the lesion.

In 1865 Moore(43) inserted silver wire into an aneurysm of the ascending aorta for the purpose of producing clot formation. In 1879 Corradi(44) added the passage of galvanic current through the wire. This method was used for a period of time and then fell into disuse. Blakemore and King(45) revived the Moore-Corradi treatment in 1938. It was modified, in that the current applied was carefully controlled so as to produce coagulation in the stagnant portions of the aneurysm and no coagulation in the fast moving stream of blood. Blakemore(46) has recently published good results with this method of treating aneurysms. The only real disadvantage of this method is the need for a rather large battery of carefully calibrated equipment.

Page⁽⁴⁷⁾ called attention in 1939 to the irritative properties of cellophane. Pearse⁽⁴⁸⁾ used cellophane experimentally in 1940 to occlude large arteries. Harrison and Chandy⁽⁴⁹⁾ effectively used cellophane in 1943 in the treatment of a clinical case of aneurysm of the subclavian artery. It has since been used with success in a number of instances. It was later determined⁽⁵⁰⁾ that it was not the cellophane that was irritative but the dicetyl-phosphate which was used as a stripping agent in the manufacture of cellophane. With this in mind, Berman and others⁽⁵¹⁾ later recommended the use of 0.9 per cent dicetyl-phosphate in olive oil to be injected about the aneurysm. This method permitted the safer placement of the effective agent on all surfaces of the aneurysm. Either the cellophane method or the dicetyl-phosphate in olive oil method appears to be an excellent means of treatment, especially in fusiform aneurysms or when dissection is too hazardous to permit other effective measures.

Endo-aneurysmorrhaphy was first used by Matas⁽⁵²⁾ in 1888. This method of treating peripheral aneurysms has enjoyed much popularity; however, it is not easily applicable to aneurysms of the aorta or its branches. There is, however, a single report⁽⁵³⁾ of its use in treatment of an aneurysm of the innominate artery.

Excision appears to be the most rational method for the treatment of an aneurysm of the aorta or its branches. It is interesting to note, however, that very few successful extirpations have been reported⁽⁵⁴⁾. It becomes obvious that a fusiform aneurysm of the aorta would not be amenable to excision; however, a sacular aneurysm, if surgically accessible, might well be treated by this method. A number of aneurysms of the aortic branches might also be excised. The vascular tissue at the site of the neck of a saciform aneurysm is usually quite fibrous and will hold sutures quite well. An aneurysm distal to the left subclavian might well be excised and continuity restored by homograft. This method⁽⁵⁵, ⁵⁶⁾ has recently met with sucess in a number of cases. Ligation without excision of the sac is not to be recommended and the hazard of necrosis and rupture has been pointed out by Tuffier⁽⁵⁷⁾ and Cooley and DeBakey⁽⁵⁴⁾.

FOREIGN BODIES AND WOUNDS OF THE HEART

With man competing in this age of mechanization and speed and with the return of military operations, foreign bodies and wounds of the heart are relatively common. Foreign bodies may find their way into the chambers of the heart by direct entrance or by embolization from vessels. Foreign bodies may also be found within the myocardium or immediately adjacent to the myocardium. Swan and others⁽⁵⁸⁾ give the following indications for operative removal: (1) in patients who have evidence of persistent or recurrent sepsis, as manifested by fever, leucocytosis, positive blood cultures, septic or bland emboli, recurrent bouts of pericarditis or evidence of progressive myocardial damage or dysfunction; (2) in patients in whom, with or without symptoms, the foreign body is identified as lying (a) free in a chamber of the heart, (b) impinging upon a valve leaflet or (c) impinging upon the myocardium during cardiac activity; (3) in patients who harbor an intractable cardiac neurosis related to the presence of the foreign body. The same authors give the following contraindications for elective removal: (1) those patients in whom foreign body is very small (3 mm. or less); (2) asymptomatic patients in whom the foreign body is identified entirely within the myocardium; (3) asymptomatic patients without definite indicaton for intervention. They have found angiocardiography quite helpful in localization and enthusiastically recommend removal of foreign bodies when indicated.

Wounds of the heart may or may not require operative intervention. Many of the small penetrating wounds of the heart can be simply treated by aspiration of the pericardial sac as previously alluded to. However, if repeated aspiration or other evidence indicates that the wound is of substantial size, immediate thoracotomy and repair of the wound is mandatory.

COMMENT

An attempt has been made to emphasize the use of various surgical measures which are now feasible in the treatment of various cardiovascular disorders. Some have shown brilliant results and others can be less enthusiastically recommended. This field of surgery is indeed young and there is every reason to believe that methods used today will be markedly improved in the future and that many new methods will be devised. The further development of the heart-lung unit to carry on extracorporeal circulation safely will open new horizons and will permit intracardiac surgery under direct vision in a manner which can only be dreamed of today.

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FRUIT SUGARS IN LOW-CALORIE DIETS

Some patients are obese and hypoglycemic at the same time. While needing to take off weight, they must at the same time be on guard against a deficiency of sugar in the blood. Replying to a doctor's query in the Journal of the American Medical Association, an authority states that the diet for an overweight patient with hyperinsulinism should be low in carbohydrates and high in proteins, with a limited amount of fats. "Fruit or fruit juices (orange, apple, or grapefruit) should be taken for breakfast, every two or three hours between meals, at bedtime, and, if awake, during the night," the answer adds.

Significance of Arrhythmias In Myocardial Infarction*

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Doctor Purvis reviews part of the literature dealing with cardiac arrhythmias in the course of myocardial infarction, then gives the details of seventy-two cases studied at the Lincoln General Hospital. He finds concordance between his case studies and the literature, both bearing out the conclusions that (1) any type of irregularity of rhythm may occur; (2) posterior infarctions often lead to auricular and nodal extrasystoles or a-v block; (3) that ventricular tachycardia, auricular flutter or fibrillation and complete a-v block signal a more ominous prognosis; and, (4) that digitalis and/or quinidine have little or no place in treatment of arrhythmias, per se.

EDITOR

It would be presumptive of me to go into detail to this group about ordinary management of myocardial infarction. However, there are certain aspects of this cardiovascular catastrophe which warrant a somewhat more uniform knowledge, and I am speaking of the arrhythmias which may occur during an infarction. When one is faced with a seriously ill patient whose cardiac mechanism is, or was presumed to be, normal prior to the injury, there occurs a slight feeling of insecurity, when auscultatory and electrocardiographic variations from the normal occur.

Several questions arise and if possible should be answered in the clinician's mind in order to evaluate the patient's progress and ultimate prognosis.

1. What arrhythmias may develop in acute myocardial infarction?
2. Is there any relationship between the area of infarction and the type of arrhythmia?
3. What arrhythmias denote a more serious prognosis?
4. What arrhythmias demand treatment in the presence of a myocardial infarction?

In taking up the first question, "What arrhythmias may develop in an acute myocardial infarction," it is discovered that almost any pattern is possible.

1. Auricular extrasystoles
2. Ventricular extrasystoles
3. Auricular flutter
4. Auricular fibrillation
5. Nodal rhythm
6. Partial heart block and complete heart block
7. Bigeminy
8. Trigeminy
9. Ventricular tachycardia

In reviewing various reports, it was ascertained that conclusions were inconsistent in educing one type as predominant over others. The incidence of arrhythmias in acute coronary occlusions is variously reported to occur in from 9 to 38 per cent with an average of about 18 per cent. The most common abnormalities of rhythm are the premature contractions of ventricular and auricular origin. From the above table, it is obvious that any arrhythmia may develop in the presence of an acute myocardial infarction.

The second question, "Is there any relationship between the area of infarction and the type of arrhythmia?" To evaluate this question accurately one must review briefly the relationship of the nerve supply of the heart to its blood supply. Gross(1) states that the auriculo-ventricular node is located in the upper posterior part of the interventricular septum and that in 92 per cent of the hearts, the blood supply to this particular region is by way of the right coronary artery, through its branch known as ramus septi fibrosi. This is the specific artery to the auriculo-ventricular node. Furthermore, the auricles and the sino-auricular node are also supplied by the right coronary artery. Consequently, on the basis of probability, one might assume that a posterior infarction, due to right coronary artery occlusion would interfere with the nerve supply of the heart in a high per cent of cases. The result would be a high incidence of auricular and nodal arrhythmias as well as disturbance of auriculo-ventricular conduction, as manifested by heart block of varying degrees.

That this supposition is correct is supported by the report of Master and others(2) in which 11 of 12 cases of complete or partial heart block were associated with posterior infarction. Rosenbaum and Levine(3) noted in 20 of 29 cases of posterior occlusion, the existence of partial or complete heart block. In fact, Golden(4) found an incidence of 24.1 per cent auricular and nodal arrhythmias associated with posterior infarction and only 2.7 per cent in anterior infarction. Auricular fibrillation, on the other hand, seemingly has no relationship to the location of the infarct, as stated by Mintz and Katz(10). However, Thompson and Feil(5) and Wood et al(6) reported a high incidence of auricular fibrillation in association with lateral wall infarction.

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The question of the relationship between the area of infarction and the arrhythmia then may be answered in the affirmative; that is, — auricular and nodal arrhythmias and auriculo-ventricular blocks are more common in posterior infarction. Otherwise, there seems to be no particular relationship between the arrhythmia and the area of occlusion.

The question, "What arrhythmias denote a more serious prognosis?" is an important one for the clinician to be able to incorporate in his ability to give an accurate prognosis. A study of 572 cases of recent myocardial infarction by Mintz and Katz(10) uncovered 94 instances of arrhythmia, or 16.4 per cent, with a mortality rate of 43.6 per cent as compared to a rate of 21.8 per cent for the entire series. They concluded that arrhythmia is an extemely grave complication.

It usually has been considered that occasional premature auricular, ventricular and nodal premature beats are well tolerated and do not appreciably alter the prognosis. Billings et al(7) in a study of 240 cases of acute coronary occlusion found an overall mortality rate of 40.4 per cent and that 47 per cent of those with premature contractions expired during the observation period of thirty days. This variation was not considered significant. Other studies have resulted in similar observations. However, if extrasystoles occur in pairs, runs, or arise from two foci, there is an appreciable and significant increase in mortality rate.

Askey and Neurath(8) reported 84 instances of auricular fibrillation in 1,247 patients with infarction. Fibrillation of a transient nature is not serious, but if it persists over a twenty-four hour period, the rate of death rises rapidly. Fibrillation may disappear suddenly or become chronic. Prior to the advent of anticoagulants, thromboembolic phenomena occurred frequently and constituted one of the chief causes of death. Furthermore, congestive failure may develop in presence of fibrillation and require immediate treatment.

Partial or complete heart block may develop early, remain permanently or disappear. The tendency is for a complete block to revert to partial block and then to return to normal sinus rhythm. If a complete heart block persists for several days, it usually becomes permanent. Auricular flutter and ventricular tachycardia denote an emergency and require treatment as early as possible if anything is to be accomplished, particularly in the latter situation.

In general terms, it is believed the arrhythmias which have a serious prognostic significance can be summarized as follows: runs of premature beats, auricular fibrillation, auricular flutter, complete and partial auriculo-ventricular block and ventricular tachycardia. The other arrhythmias seem to have little influence on the mortality rate.

The question, "What drugs, if any, are indicated in the presence or prevention of arrhythmias?", has been given a moderate amount of study. It is a difficult question to answer, because many arrhythmias will stop spontaneously and certain ones develop in spite of medication.

Masters et al(9) fifteen years ago emphasized that digitalis and/or quinidine therapy in acute myocardial infarctions is more dangerous than the presence of the arrhythmia alone. More recently Mintz and Katz(10) studied 94 patients with arrhythmias and found that the mortality rate in those receiving digitalis, quinidine, or both, was definitely higher. Cutts and Rapoport(11) studied a control series of fifty-five patients who did not receive quinidine and three similar groups who received varying doses of quinidine from 0.2 to 0.6 of a gram four times a day. It was concluded by these authors, after analysis of the material, that there is no support for routine use of quinidine following myocardial infarction, either for prevention, or for control of arrhythmias.

It would seem that cardiac drugs have very little place in the management of arrhythmias, unless it is the opinion of the clinician that cardiac failure is present or imminent and the arrhythmia is contributing to the failure. In these circumstances, one is justified in the administration of such drugs.

MATERIAL FOR STUDY

To determine the relationship of arrhythmias to the mortality rate of acute myocardial infarction, a review of seventy-two cases admitted to the medical service of Lincoln General Hospital over a three year period was undertaken. The only cases accepted in the series were those admitted within twenty-four hours after the onset of the clinical symptoms. The patients who exhibited intraventricular block or had pre-existing arrhythmias insofar as could be determined, were eliminated from the series.

Of the 72 cases, there were 12 deaths. The overall mortality rate was 16.6 per cent which compares favorably with other reports. Of the total group, 46 cases or 63.8 per cent were classified as anterior myocardial infarction. Twenty-five cases or 34.5 per cent were posterior in location. There was one case that exhibited a typical anteroposterior pattern and could not be listed exclusively under either group. Arrythmias were discovered either in the first or subsequent cardiograms during a thirty day period, in thirty-seven cases. This represents an incidence of 51.3 per cent. It should be noted at this point that auricular and ventricular premature contractions were included in this group inasmuch as death did occur in some of these cases. Intraventricular block was not considered.

Of the thirty-seven cases of arrhythmias, there were eight deaths or an incidence of 21.6 per cent as compared with thirty-five cases with four deaths or a mortality rate of 11.4 per cent in those without arrhythmias. In other words, the mortality rate in the arrhythmia group on a statistical basis, was almost double that found in the group without arrhythmias. These results were comparable to other series and verify the contention that arrhythmias definitely influence mortality rate.

Detailed analysis of the various types of arrhythmias is presented in Table 1. These are listed according to mortality ratio.

	Cases	Per cent of Total Arrhythmias	Mortality Per cent
Ventricular tachycardia	1	2.7	100
* Auricular fibrillation	5	13.5	60
Auricular flutter	1	2.7	100
* Complete a-v block	2	5.4	50
Auricular extrasystole	6	16.2	33.3
* Ventricular extrasystole	15	45.4	6.6
Auricular and ventricular extrasystoles	3	8.1	None
Runs of ventricular extrasystoles	2	5.4	None
Partial a-v block	3	8.1	None
Auricular bigeminy	1	2.7	None
Auricular trigeminy	1	2.7	None

*Two arrhythmias present.

From the foregoing table, it is obvious that ventricular tachycardia, auricular fibrillation and complete heart block have a serious prognostic connotation. This is in keeping with other series reported. The rather high incidence of deaths, 33.3 per cent, in those with auricular extrasystoles is not in keeping with the consensus of opinion that this arrhythmia does not appreciably alter the mortality rate. No explanation is offered for this variation. In three instances, two arrhythmias were present but the predominant one was listed in the table as such.

Of the twelve cases that died, nine were anterior in location and three were of the posterior infarction type. Eight of this group received digitalis and in only two were signs of congestive failure present. Apparently, the digitalis given these patients produced no particular alleviation of signs.

CONCLUSION

An attempt has been made to clarify the role of the arrhythmias in affecting prognosis of acute myocardial infarction. It is realized there are many variables to be considered such as whether or not a preceding infarction had occurred and whether congestive failure is a complicating problem. Notwithstanding these variables, the following conclusions appear to be justified:

1. Any arrhythmia may appear at the beginning or during the clinical course of an infarction.

2. Auricular and nodal premature beats and auriculo-ventricular block are more common in posterior infarctions. All other arrhythmias seem to have no relationship to the area of occlusion.

3. The arrhythmias denoting a more serious prognosis are runs of premature beats, auricular fibrillation, auricular flutter, complete or partial auriculo-ventricular block, and ventricular tachycardia.

4. Cardiac drugs such as quinidine and/or digitalis have little place in the management of arrhythmias, unless congestive failure, as a result of, or co-existing with an arrythmia is present.

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Practical Electrocardiography*

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Doctor Magiera points to heart disease as the chief cause of death. He believes that after proper clinical study of the patient, the electrocardiogram is our most helpful single laboratory procedure in evaluating the cardiac status of the patient. He stresses that the greatest value of the 'cardiogram is in coronary disease and that it tells us nothing about valvular defects or etiology. It may be normal in the presence of severe myocardial disease. It must not be misread to the detriment of the patient with or without heart disease. It must be evaluated along with other laboratory data and with clinical skill.

EDITOR

Heart disease is the chief cause of death today. The continuous aging of our population forewarns that it has not yet reached its peak. It is natural then, that most physicians have a large, if not confining interest, in the study of heart disease. This interest is reflected in the growing use of the elctrocardiogram in all types of medical practice.

How important is the electrocardiogram in practice? After the history and physical examination, it is a most valuable and necessary means of study in the heart patient. When it is correlated with all other clinical data it skills the physician in a more thorough understanding of the cardiac status of the individual. Without this correlation it is but another laboratory test and in many instances, a useless one.

Electrocardiography possesses its most important clinical potentialities in coronary heart disease. It is specifically useful in localizing the tissue death of an infarction, and very often must be relied upon to establish the diagnosis. This is particularly true in the individual who presents himself with a silent coronary or in one who has a condition with similar symptoms where a differential diagnosis has to be made. Serial tracings will reveal varying patterns differing with the age of the infarction. Residua of such a condition may remain present for years and having a base line tracing is very important when future cardiac insults occur. The complications that occur with a myocardial infarction, such as arrhythmias, and various types of blocks, are readily picked up by a tracing.

What is the role of the electrocardiogram in angina pectoris? In most instances the diagnosis of angina is made solely on clinical grounds and indeed the electrocardiogram is normal in over fifty percent of such individuals. But not too frequently we may be confronted with a different situation; the symptoms in an individual may be atypical and inadequate and their cause may not be evident. Or again, when the resting electrocardiogram in a younger individual is normal, and an objective record is needed for insurance, litigation or military purposes, some procedure is necessary to attempt to establish the diagnosis on objective grounds. This may be done in two ways. If a tracing can be made and changes occur while the individual is having chest pain it may be considered diagnostic of an angina pectoris. This is not always practical and may be difficult to do. A test that may be used in an effort to obtain an objective record is the exercise test.

Enthusiasm and criteria for the exercise tests have differed. Wilson felt that the best test was one in which the individual performs as much exercise as ordinarily produces pain. He believed that pain and electrocardiographic changes leave little doubt as to the diagnosis. Master, on the other hand, attempts to standardize the exercise test according to the weight, height and sex of the individual. If an individual has a positive exercise test, as pictured by the transient ischemia or injury patterns, this indicates the presence of coronary artery disease. The important thing to remember is that a negative test does not rule out the disease, and the physician, in such instances must rely upon his clinical judgment in establishing his diagnosis. The exercise test is not without risk, for infarctions and sudden death have been reported. A recent infarction or a definite clinical history where an objective record is not needed, are contraindications to doing the exercise test.

Coronary heart disease may likewise produce non-specific changes in the electrocardiogram. Similar changes may be seen in other types of heart disease, such as luetic, and rheumatic, and in pericarditis, myocarditis and trauma. The tracing in itself is not differential between these various conditions.

The electrocardiogram may be altered in the presence of ventricular hypertrophy. This is true of both ventricles, but it is more common with the left ventricle since the right ventrical must enlarge to a great degree before changes are produced. Diagnosis may be made from the limb leads in 25 to 40 percent of the individuals, but the precordial leads are more important and diagnostic in this condition. The presence of hypertrophy is not specific for any one disease, but as a rule it indicates that the disease has been present for some time in order to cause these changes. It likewise has no prognostic value. It may be a definite aid in the study of valvular disease, since pulmonary lesions or a mitral stenosis are very often associated with a right ventricular hypertrophy while with aortic lesions or mitral insufficiency, left ventricular hypertrophy may result.

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In the presence of inflammatory diseases, the electrocardiogram may show the first indication of cardiac involvement. Myocardial changes may occur in rheumatic fever, diphtheria, various coccal diseases, and in many virus diseases, such a mumps, poliomyelitis, infectious mononucleosis and hepatitis. Serial tracings should be taken under these conditions because a changing pattern will indicate activity while a stable pattern indicates quiescence. Myocardial involvement in various inflammatory diseases may be electrocardiographically completely reversible; however, when a lesion is located at a strategic point, permanent residual changes may result.

The electrocardiogram is also altered and serial changes are produced in acute pericarditis. Generally, fresh lesions affect the RST segments producing currents of injury while less recent infections will cause "T" wave changes. Regression in the form of the tracing back to normal may take a period of several days or weeks. Pericarditis with effusion and constrictive pericarditis will cause low voltage and non-specific changes on the electrocardiographic record. In constrictive pericarditis, it is well to remember that the electrical axis in itself may not be used as a diagnostic point because the electrical axis may not shift in some normal individuals.

Acute pulmonary embolism may cause a sudden strain on the right side of the heart, and resulting electrocardiographic changes may be produced. The tracings must be taken early because the changes that are produced may be swift and may alter rapidly. As a result of the strain on the right side of the heart, an S1 and Q3 pattern may be produced. Prominent "P" waves and a subsequent right axis shift or a picture of right ventricular hypertrophy may also appear. A tracing may be the important point in differential diagnosis between an acute pulmonary embolism and an acute myocardial infarction. In chronic cor pulmonale the record may or may not change. The findings that are compatible with such a condition are prominent "P" waves in leads two and three, and the patterns of right ventricular hypertrophy or complete and incomplete right bundle branch block.

There has been an enthusiastic study of the effects of abnormalities of serum electrolytes on the cardiogram. It is felt that the chemistry of the extracellular fluid about the myocardial muscle fibers is altered before changes are produced in the blood serum. This would indicate that the cardiograph is a more sensitive indicator of these changes than is the level of blood electrolytes. In states that produce a hyperpotassemia, such as renal insufficiency from various causes, untreated diabetic acidosis, and adrenal insufficiency, certain changes may be produced. These consist of high "T" waves which may be followed by various disturbances in rhythm. The changes that are produced in low-serum potassium states are similar to those of digitalis but the QT interval is prolonged. Hypopotassemia may occur in treated diabetic acidosis where a large amount of fluid washes out the serum potassium or in intestinal obstructions and desoxycorticosterone intoxication. When the serum calcium is lowered, definite changes may also be produced consisting of a long flat "T" wave and a prolonged QT interval.

There are various drugs that cause changes to be produced electrocardiographically, but here we are interested primarily in the drugs that are usually used in the cardiac individual. Digitalis does produce alterations in a tracing, but its effect is not specific. The changes that may be produced vary from individual to individual. The electrocardiogram is of no value in establishing clinical digitalization. Its most important role, when studied with the use of digitalis, would be the detection of arrhythmias or various conduction defects which would caution the physician to proceed carefully. Quinidine may also produce changes in a heart tracing. These may consist of non-specific myocardial changes, intraventricular or bundle conduction defects.

There are various other conditions in which the electrocardiogram may be useful.

In the presence of hyperthyroidism it may reveal an arrhythmia, if such is present, definitely identifying the type present. In myxedema the characteristic bradycardia together with low voltage of all the waves and non-specific myocardial changes may appear. All of these changes are seen to disappear with adequate therapy. Contusions of the chest wall may be associated with non-specific myocardial changes or patterns of ischemia or injury. Anemia due to various causes is known to produce non-specific myocardial changes.

In the study of congenital heart disease, the history and physical examination and, in selected cases, venous catherization are the more important. It should be remembered that right axis shift is characteristic in the infant and patterns of right ventricular hypertrophy occur below the age of three. It is a general rule that left axis deviation in a child below the age of ten is almost always abnormal and below the age of five it is definitely abnormal. The patterns of left ventricular hypertrophy may be seen in patent ductus, coarctation, aortic stenosis and congenital hypertrophy of the left ventricle. Right ventricular hypertrophy may be seen in pulmonary stenosis, Tetralogy of Fallot and Eisenminger complex. In dextrocardia there is inversion of all deflections of standard lead one; right precordial leads are those of a left and vice versa.

While the electrocardiogram is very useful in many diseases and many conditions it is well to remember that it has definite limitations. There is no sharp dividing line between the normal and abnormal. Too much stress placed on minor or insignificant changes or those due to technical error may create a cardiac neurotic or a cardiac cripple and be very difficult to correct. We must also be cognizant of the fact that the electrocardiogram may be normal in the presence of serious heart disease. It would be a serious error, for example, not to treat a patient for a myocardial infarction when the history and other findings are characteristic, just because the heart tracing is normal. The presence of other electrocardiographic abnormalities, such as bundle branch block or AV block may be the first indication that there is progressive disease in one patient and may be remnants of an old, healed, harmless lesion in another. If we depend on our history and physical examination and correlate them with our electrocardiographic findings, we will not go astray too often.

The electrocardiograph must not be used as the sole indicator of the presence or absence of heart disease. It does not establish an etiological diagnosis nor does it depict valvular abnormalities. It cannot in any way measure the functional reserve power of the heart and does not yield a prognosis. The electrocardiogram must be interpreted as any other laboratory procedure in which case its usefulness in practice cannot be denied.

PROGRESS IN CARDIAC THERAPY

(Continued from page 34)

and need not be used often. The suggestion that patients administer a mercury diuretic to themselves is untenable.

Rest, in the acute phases of congestive heart failure, is much overdone. The patient in this state is a potential candidate for pulmonary emboli from lower extremity thrombosis, even more so than in surgical cases. Early ambulation including toilet privileges should be allowed in all patients with congestive heart failure. "Absolute bed rest" should never be prescribed. However, after restoration of cardiac competency but with a diminished cardiac capacity, a rest program may be underdone or dismissed with a few generalities. The long range program of activity involves part or whole day of rest. Each occupation requires a separate scale of activity. A bit of time advising the patient of his privileges and handicaps is well spent. One hears of expensive changes from two story house to ranch houses, which do not seem justified. Climbing stairs is a very variable procedure depending on frequency and speed of ascent and type of stairs. Usually a chair or opportunity to rest can be provided. The "old home" may thereby be retained with its emotional appeal and without incurring heavy financial loads, which now are tremendous.

The nutrition of a patient with congestive failure is the most important part of management. With portal stasis, secretory function, mobility, and assimilation are seriously impaired. If this continues for any length of time serious deficiencies can occur. This requires planning and ingenuity on the part of the physician and dietitian. It must be so planned that, whether the quality is liquid, soft, bland, or general, all food constituents are provided. Especially the protein component must be adequate.

Vitamins may be administered orally.

FRIEDRICH W. NIEHAUS, M.D.

Chorionepithelioma*

DR. FRANK TANNER: I am presenting this out-patient case because it is an example of a condition that we have not had an opportunity to have before in the tumor clinic. Since the clinician is not able to be here, I will present it. The material came from out of town. I will give this story a little bit as the case unfolds, rather than the usual method of history taking. This was a 42 year old white female who was admitted to a hospital outside of Lincoln about three weeks ago because of intermittent and rather profuse bleeding from the vagina, which had occurred both at the menstrual period and between the menstrual periods for about five months. Her physical examination at this time was essentially negative except for diffuse enlargement of the uterus. The rest of the pelvic adenxae appeared quite normal, and the physician who was handling the case felt that in view of the history it was probably fibroids, although the possibility of incomplete abortion was considered. Dilatation and curretage was done and the material sent to us for examination.

We received a large amount of material. The microscopic examination of the curettings showed a high grade, undifferentiated neoplasm that was very suggestive of a chorionepithelioma. There was a great deal of hemorrhage in the tumor. There was some suggestion of isolated chorionic tissues without any villus formation and while we knew it was a high grade tumor, we weren't actually sure that the tumor was a chorionepithelioma. We thought that perhaps it was and suggested that they send us a urine specimen from the patient. The urine specimen revealed positive pregnancy tests by the usual method and then we diluted the urine considerably and found that even 1/4 ml. of urine would still give a positive test, whereas, ordinarily it takes about 3 ml. of urine for a positive test.

Then the doctor submitted the following interesting history to us. This lady had delivered a normal infant about sixteen months before her present entrance. The physician made a note on the chart at the time of the delivery that the placenta looked peculiar and asked that it be sent to the laboratory. Whether it was sent to the laboratory or whether it was sent and then discarded, we do not know, but it was never forwarded to us in Lincoln. He made a note on the chart that the placenta was abnormal and wondered about a mole. Then, following her delivery of the normal child (and the child had remained normal) she had a reestablishment of normal menses for a period of about ten or eleven months. Early last summer however, she missed about two periods. Following that, she began to have this irregular bleeding which had persisted to the time of her uterine curettage. In other words there was a history of a pregnancy sixteen months before, a period of normal menstruation, then two months of amenorrhea, and then the irregular bleeding persisting to the time of the curettage. Since the time we received this material, Dr. Neumeyer has done quite a bit of reading on the various features of chorionepithelioma and found that practically all cases that could be diagnosed by curettings already had metastasis. They were considering what to do about the treatment of the case and we recommended as early and complete hysterectomy as possible, suggesting that they get an x-ray of the chest before doing surgery. Dr. Neely will show the film in a moment. She bled so severely that it was necessary to do more or less of an emergency hysterectomy to control the bleeding following the curettage. Dr. Orvis Neely will show the x-rays of the chest that were taken prior to the hysterectomy, and then we have the specimen of the uterus to show you.

DR. O. A. NEELY: (showing films) This film was made the morning of the hysterectomy and shows pulmonary metastases. I think perhaps you can see some of those rounded deposits, relatively early metastases. They are all small but confluent in some areas.

DR. F. TANNER: This bleeding was very severe and after Dr. Orvis' report they thought they would do a ligation of the uterine vessels, and that would be all but when they got in and found it would be just as easy to take out the uterus as to ligate the uterine vessels, they did a subtotal hysterectomy. The patient has made a very successful postoperative convalescence and has been dismissed from the hospital. Her general health has been very good. No weight loss or other signs of significance. I am glad that they did remove the uterus, because once in a great while, it is said, this type of tumor may regress when one removes the primary focus. So I think it is well worth the chance.

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*Lincoln Hospitals Tumor Clinic. Lincoln General, Bryan Memorial and St. Elizabeth's Hospitals participating. John T. McGreer, M. D., Chairman.

(Editor's Note: This excerpt from the transcribed transactions of the Lincoln Hospitals' Tumor Clinic was prepared for publication by Doctor J. Marshall Neely.)

DR. R. WHITHAM: Was there evidence of metastasis in the abdomen?

DR. F. TANNER: Apparently not. I don't know about that.

DR. O. NEELY: She showed rapid improvement in all of her clinical symptoms immediately after surgery. I would make one remark about my discussion with the surgeon down there. After seeing this film, I made the suggestion that they not subject this woman to a hysterectomy. However, I was not aware of the statement that Frank just made, that metastases may regress after removal of the primary nidus. I did suggest that possibly if her bleeding was too severe a radium pack in the uterus might produce caustic dosage to the endometrium and that with transfusions etc., it would take about 10 days to control this as long as she might live. Then they decided that it would be quicker and perhaps simpler to do a hysterectomy.

DR. McGREER: Did she have any chest symptomatology at the time the film was taken?

DR. O. NEELY: No she didn't.

DR. R. WHITHAM: Why did you say, Frank, this was unusual. Haven't there been cases of chorionepithelioma reported in our clinic?

DR. F. TANNER: Not in our tumor clinic records here and I recall only two other cases in a little over eight years that I have had an opportunity to see material on. They have all run a very rapid course as far as the outlook for the future is concerned. Both of the others expired very quickly.

DR. H. MILLER: I would like to state that sometimes we think of malignant melanoma being a very malignant tumor, but this is the most malignant, I think.

DR. G. COVEY: Does anyone know about the hormonal balance in these cases?

DR. F. TANNER: They have many signs of pregnancy. Sometimes they will have breast soreness and pigmentation and have a feeling as of pregnancy. Actual studies of hormone excretion and hormone studies, I don't know enough about to make a comment.

DR. WHITHAM: What is the presumptive situation in a case like this at the time of pregnancy? Let us presume that there was an abnormal placenta sixteen months before this tumor appeared. What might be the situation there and what might have been done for her?

DR. F. TANNER: First of all it would be unusual to find a hydatidiform mole (a cystic grape-like structure of degeneration in placenta) in a placenta which had carried a baby to full term. That is one thing against this being a tumor arising at that time. Most of them occur following mole formation of the placenta, but most of those are sufficient to destroy the placenta, so that abortion occurs quite early. Saying that this was an unusual example of chorionepithelioma developing from the degeneration of the placenta of a mature infant, if we had made an examination at that time and confirmed the suspicion that this was a mole, he wouldn't have been justified in doing any radical therapy at that time, but he would have been forewarned to the point where he probably would have repeated pregnancy tests at monthly intervals on this patient. If they stayed positive, then he would have been justified in doing a D&C, and perhaps hysterectomy without D&C. That would have been the only thing that would have been helpful. It is very difficult to make a diagnosis of chorionepithelioma from currettings. In fact there are some pathologists who say that you should not do it because normal chorionic tissue is so wild in it's appearance that you can't tell whether the thing is regressing as it should normally after a pregnancy or whether it is invading or growing. In other words, unless you have the uterus, it would be hard to say on which side of the fence those chorionic tumor cells are. In this case and, as reported in literature, when you can make a diagnosis from the currettings it is usually too late to do very much about it, and they usually have distant metastases.

DR. GRACE LOVELAND: Was there a history of bleeding sixteen months ago?

DR. FRANK TANNER: Not that I know of. I don't think they were too impressed with anything in the clinical course.

DR. ROY WHITHAM: What is the percentage of moles that develop chorionepithelioma?

DR. FRANK TANNER: It is supposedly pretty high. There was quite a controversy but it has been reported as high as 50%. In all the moles that we have seen, we certainly can't agree with that. Others believe the incidence of chorionepithelioma is from 5% to 10%.

This patient expired about six months after admission to the hospital apparently due to extensive widespread metastases.

Tuberculosis Abstracts

CLINICAL EVALUATION OF A REHABILITATION PROGRAM FOR THE TUBERCULOUS

In 1943 the former tuberculosis sanatorium of the District of Columbia was reopened as a rehabilitation center for tuberculous patients. The center was intended to serve two important purposes: It would alleviate a serious bed shortage for the treatment of tuberculosis; and it would bridge the gap between the sanatorium treatment of the patient and his return to normal activity in the community. The purpose of the study reported here was to determine whether or not the rehabilitation program reduced the number of relapses and readmissions.

It might be well first to briefly summarize the hospital program. The hospital is a 125-bed institution under the administrative supervision of the Municipal Hospital. Patients are admitted from both the Health Department hospitals. Requirements for admission are residence in the District of Columbia, negative sputa and gastric washings, stable x-ray findings, and the ability to handle such self-care activities as dressing and attending meals in the dining room. Treatment, such as pneumothorax, pneumoperitoneum and thoracenteses, is continued. X-ray films of the chest are taken at two-month intervals. Consultation service is available through the clinic at the Municipal Hospital.

Occupational therapy is prescribed for all patients and all patients are also seen by the vocational counselor. Regular staff conferences are held. These are attended by the physician, nurses, occupational therapists, vocational counselor, and medical social worker. At conference the plan for the patient's rehabilitation is reviewed, any modification of program is decided, and finally, discharge is considered when all members agree that existing problems have been met as fully as possible.

The ideal criteria for discharge are: (1) Disease inactive, with laboratory examinations negative and x-ray appearance stable; (2) Complications, if present, either not serious or successfully treated; (3) Work capacity demonstrated and adequate for future plans; (4) If gainful employment is necessary and patient is not yet working, prospects for employment fair; and (5) Social and home conditions are satisfactory.

The follow-up study was done to evaluate this program of rehabilitation. It was based on the replies to yearly follow-up letters sent to former patients, the checking of admissions to other hospitals in the District, and interviews with former patients. All information received was checked against the files of the Tuberculosis Bureau's Central Registry.

The study was limited to patients discharged from the opening of the hospital in 1943 through December 31, 1949. The status was determined as of June 30, 1951, so that the post-discharge period ranged from a minimum of 18 months to a maximum of over eight years. The follow-up was limited to those patients who were at the center more than one month and who were discharged with inactive disease. This group of 716 patients was divided into sub-groups, according to type of discharge. In the follow-up investigation, information was obtained for 641 patients. The clinical status of 75 patients remained unknown and this group was excluded from the statistical analysis.

The analysis, then, is based upon a group of 641 discharged patients whose clinical status was known. There were 505 patients discharged with advice, of whom it was found that: 366, or 72.5 per cent, were rehospitalized after their discharge from the center; 37, or 7.3 per cent, were dead of tuberculosis, 22, or 4.4 per cent were dead of other causes.

The two groups of "walk-outs" and "disciplinary discharges" have a similar rate of relapse and death from tuberculosis, and for the purpose of study were combined into a single group of 136 discharges against advice, of whom: 60, or 44.0 per cent were alive and well; 48, or 35.0 per cent were rehospitalized; 20, or 15.0 per cent were dead of tuberculosis; 8, or 6.0 per cent were dead of other causes.

Thus, of patients discharged with medical advice, 72.5 per cent were alive and well and had never been rehospitalized; whereas, of patients discharged against medical advice, only 44 per cent were alive and well. Before concluding that the completion of rehabilitation was probably significant in the small number of relapses found in the first group, it was necessary to determine that the two groups were comparable in other respects.

Detailed comparison of the two groups showed that they were comparable with regard to age, marital status, diagnosis, treatment, onset of illness, length of hospitalization prior to transfer here, number of previous admissions to the sanatorium, and education. These factors then could not explain the difference between the two groups. Furthermore, race and sex, length of stay at this hospital, clinical condition at discharge, and alcoholic history, did not explain the differences between them.

A correct evaluation of a rehabilitation program necessitates the comparison of two groups of patients, equal in all respects except that one group shall have had rehabilitation and the other shall have been discharged without rehabilitation. Moreover, both groups should have been discharged during the same period of time. To meet such criteria

(Continued on page 76)

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THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

AMERICAN FEDERATION OF MEDICAL CENTERS

During the past few years all types of plans have been presented for taking care of the nation's health. Primarily, these plans have been sponsored by lay groups, labor and government. Now that the national compulsory health insurance issue seems to be in a temporary coma, a business-supported medical care plan has been recently unfolded. It is called the American Federation of Medical Centers, a non-profit organization. Among its directors are Dr. Edgar H. Norris, a Detroit surgeon, a New Jersey oil executive, a New York lawyer and a Detroit business man.

The A.F.M.C. doesn't intend to build or run any local medical centers. It hopes the communities will do this for themselves after the national organization has done the necessary planning, surveying and educational work for the community. The goal: "For the first time to solve the whole problem of medical care on a community basis."

A.F.M.C. officials hope that one or more such medical centers can be set up in each city, organized "like a functionally-designed industrial plant." Each subscriber will receive complete medical, surgical, dental and hospital care, for which his yearly premium is under $100. Subscribers will choose their family physicians from the staff of the medical center.

The plan's founder, Doctor Norris, former dean of the Wayne University College of Medicine, says the idea isn't a new one. He points out that it follows the recommendations of the 1932 report of the Committee on the Costs of Medical Care. This committee recommended that complete medical care be furnished by medical groups organized around a hospital. The committee said further that "the costs of medical care should be placed on a group payment basis" — by insurance, taxation, or both. That is about what A.F.M.C. wants to do. It would like to project for the country the principles of the Health Insurance Plan of Greater New York (H.I.P.).

A.F.M.C. feels that the problem of national health can be approached on business terms and that medical care can be distributed more efficiently. One article points out that some may "detect certain differences between selling refrigerators and providing medical care." Others may be alarmed at Doctor Norris's statement that "we'll be eliminating the fee-for-service principle."

It should be noted, too, that the minority report of the Committee on the Costs of Medical Care stated that "the corporate practice of medicine, financed through intermediary agencies, (should) be vigorously and persistently opposed as being economically wasteful, inimical to . . . high quality of medical care, and unfair exploitation of the medical profession." Another danger seen by some physicians is that a national network of medical centers would be ideally suited to national compulsory health insurance if a major push for that type of program were to be made again.

Space does not permit a more detailed analysis of the new plan, but it was felt that all members should be apprised of its existence. This plan, along with the recommendations of the Magnuson commission, will be carefully followed by your headquarters office. You will be kept informed on all pertinent details.

INSURANCE FOLDER

For the past few months your Public Relations Committee has been studying various methods of coping with some of the public relations problems associated with prepayment health and accident insurance plans. The committee has recognized — as most members have — that often times patients are extremely dissatisfied with some aspect of their prepayment plans. Almost invariably this leads to rancor toward the medical profession as well as the insurance company involved. It also destroys confidence in the whole philosophy of voluntary health insurance.

In an effort to reduce the incidence of this type of criticism, your committee has published a folder, in which is listed several points that constitute the criteria of a good health and accident policy. The folder also includes a chart on companies selling this type of insurance in Nebraska. After each company's name is listed its 1951 income from premiums, claims paid and percentage of income paid in claims. This folder will be sent to each member of the state medical association.

The purpose of this folder is to give all physicians a better background for discussing health insurance policies with their patients. It is felt that this will assist them immeasurably in selecting policies that are reliable, thereby ultimately reducing the instances of patient dissatisfaction. Your committee recommends that you file this folder and refer to it when discussing health and accident policies with your patients. It is planned now that the committee will make a similar report each year.

CRIPPLED CHILDREN'S CLINICS

February 7—North Platte, High School; W. W. Bartels, M.D., or C. Fred Ferciot, M.D., and E. S. Wegner, M.D.

February 14—Scottsbluff, St. Mary Hospital; Louis S. Campbell, M.D., or W. R. Hamsa, M.D., and Donald C. Nilsson, M.D.

February 28—McCook, St. Catherine Hospital; Howard E. Mitchell, M.D., or Fritz Teal, M.D., and J. M. Thomas, M.D.

News and Views

From The New York Times:

The National Fund for Medical Education, organized to aid medical schools in meeting ever-increasing costs, started in November an expanded $10,000,000 fund raising campaign. Half of the sum is to meet "urgent" needs, the other half to overcome "equally pressing long-range problems."

A telegram by Gen. Dwight D. Eisenhower, President-elect, one of the founders of the fund, expressed "the hope that American industry will support the campaign to the limit." The message said that "only if our medical schools remain financially solvent can we hope to place medical education on a sound basis, free of the threat of government-sponsored plans or schemes to control it."

Former President Herbert Hoover, honorary chairman of the fund, said that "a real breakdown in our independently endowed medical training system would be a national disaster."

(The work of the National Fund for Medical Education and the American Medical Education Foundation is intimately correlated. The NFME accepts contributions from lay sources, while the AMEF is responsible for securing subscriptions from the medical profession).

From a wire service:

Nebraska had about two-thirds the hospital beds it needed (last year) to meet standards set in the Public Health Act.

A report by the staff of the Joint Committee on the Economic Report made public (recently) showed that Nebraska had 10,650 beds — 5,183 short of the number considered needed to provide adequate hospital service. Information furnished by the U. S. Public Health Service showed a national backlog in needed construction totaling about 882,000 beds.

Figuring the average cost per bed at $16,000, the report said an outlay of nearly $14 billion would be required to fulfill this need.

Members of the Fillmore-Saline County Medical Society met during the latter part of December at the Friend American Legion hall. The meeting was attended by the following physicians:

Drs. A. A. Ashby, Geneva; Charles Ashby, Geneva; L. W. Forney, Crete; R. W. Homan, Crete; F. J. Stejskal, Crete; Paul Huber, Crete; F. G. Travnicek, Wilber; Frank Hamilton, Friend; Clarence Zimmer, Friend, and R. K. Johnson, Friend. Several members of the auxiliary were also present. Dr. R. K. Johnson was in charge of arrangements.

The Creighton University School of Medicine has initiated a new phase of cardiovascular research, Dean F. G. Gillick announced in December. Dr. Gillick said that motions of the heart had been traced photographically, which "should prove of great value in the study of heart disease."

The photographs are taken on a Twib-Viso recorder. "This type of research is not only new to Creighton, but is also new for this part of the country," Dr. Gillick asserted. Dr. Richard L. Egan, Omaha, will join with Dr. Gillick as the principle investigators in the new research project. Dr. James F. Kelly, Jr., Omaha, is a consultant.

The following notes on actions taken by the House of Delegates of the American Medical Association at the recent Denver session are of interest to all members:

MEDICAL CARE IN VETERANS HOSPITALS

After long debate on the contents of the "Report of Special Committee on Federal Medical Services, American Medical Association " there was general agreement that limitation of care of veterans in Veterans Administration hospitals to the following two groups is reasonable: (1) those with peacetime or wartime service whose disabilities or disease are service-incurred or aggravated and (2) those with wartime service suffering from tuberculosis or psychiatric or neurological disorders of non-service-connected origin, who are unable to defray the necessary hospital expenses.

Discontinuance of hospitalization and care in Veterans hospitals of other categories of non-service-connected disabilities, while undoubtedly proper and equitable, requires the cooperation of Congress, veterans organizations and the medical profession, hospital associations and the dental profession. It was therefore decided to encourage discussions amongst representatives of these groups with the view of future definitive action to which all parties can agree.

THE DOCTOR DRAFT LAW

The House voted to "continue to support whatever measures are necessary to provide essential medical care to the armed services," and authorized the Board of Trustees and the Council on National Emergency Medical Service to follow closely all developments which might affect the quantitative requirements for medical officers in the armed forces; and, further, to support legislation to provide the number of medical officers necessary for adequate care of uniformed armed forces.

The House recommended that the President of the United States defer any call-up of priority 3 physicians under P.L. 779 until the Selective Service and the Department of Defense have completed the processing of all physicians in priorities 1 and 2.

It was also recommended that careful study be given, in ensuing months to the following items:

1. Physical requirements for medical officers, so that doctors with physical defects may be utilized.
2. More effective recruitment methods for career personnel in military medicine.
3. Greater use of civilian doctors and hospitals in care of both military and non-military personnel and their dependents.
4. Uniform conditions of service to avoid undue competition for medical personnel.
5. Consideration of an equitable point system in the induction of physicians into the armed services.

REVISED ESSENTIALS OF AN APPROVED INTERNSHIP

The report of an Advisory Committee on Internship suggested revision of the "Essentials of an Approved Internship" and the changes which were ratified included the following points:

1. A hospital must be approved by a Joint Commission on Accreditation of Hospitals.
2. The bed capacity was raised to 150, excluding bassinets.
3. Annual admissions, raised to 5,000, exclusive of newborn.
4. Autopsy rate, raised to 25 per cent.

"MEDICAL CARE FOR ALL" PROGRAMS

The House of Delegates urged all county and state medical societies to emulate the example of a number of county societies which have established programs providing medical care to anyone unable to pay for it and, to publicize such activities through every effective medium of communication.

Dr. Louis H. Bauer, president of the American Medical Association, has outlined a nine point program for "the preservation of our American system of medicine." His nine points, worthy of attention by every doctor, are as follows:

1. Work with rural communities to establish facilities for physicians, so that we shall have a better distribution of physicians.
2. See that good medical care for the indigent is available everywhere, just as it is in some states.
3. Extend public health coverage to areas lacking it.
4. Develop plans for the care of the chronic invalid.
5. Expand our voluntary insurance program, not only to cover more persons, but to cover those over age 65 and those suffering from illness of long duration.
6. Clean our own house, by disciplining those physicians who are tarnishing the reputation of the whole profession by their unethical acts of overcharging, accepting kick-backs, and making commercial arrangements with pharmacists.
7. See that the public is protected so that they can always obtain the services of physicians.
8. Revitalize our county societies and make them leaders in their communities in all health matters.
9. Inculcate the newly trained physicians in the tradition and ethics of medicine.

Dr. Howard A. Rusk, 51, New York City physician, educator, and writer, was named recently as the 1952 winner of the $10,000 Dr. C. C. Criss Award and gold medal in recognition of his work in rehabilitating the physically handicapped.

The award was established by Mutual Benefit Health and Accident Association of Omaha to honor outstanding contributors to the fields of health and safety.

The award is not limited to medical men but is open to anyone in the United States, Canada, Alaska, and the Hawaiian Islands, where Mutual of Omaha serves, for contribution to public health or safety.

Winners in 1951 were Dr. Edward C. Kendall, biochemist, and Dr. Philip S. Hench, physician, whose joint efforts led to the development and use of cortisone for rheumatoid arthritis.

Announcements

The Nebraska Heart Association will hold its annual scientific session and business meeting at the Hotel Paxton, Omaha, on February 28th, 1953. The following will be the order of proceedure:

Registration at 9:00 a.m.

Scientific Program at 9:30 to 12:00 a.m.

Luncheon and Business Meeting, 12:00 noon.

(Following the luncheon, the Regional Meeting of the American College of Physicians will be held throughout the afternoon.

The Lancaster County Medical Society announces its first Lincoln-Lancaster Medical Conference which will be held on Tuesday, March 17th, at the Cornhusker Hotel in Lincoln. All Doctors of Medicine are cordially invited to attend. The following is the program to be presented:

9:30 a.m. to 10:25 a.m.—Registration.
10:25 to 10:30—Welcome address by Frank H. Tanner, M.D., President, Lancaster County Medical Society.
10:30 to 12:00—Symposium on Trauma; Fritz Teal, M.D., presiding.
10:30 to 11:00—Fractures in Children; Duncan C. McKeever, M.D., Houston, Texas.
11:00 to 11:15—Discussion.
11:00 to 11:45—Brain Trauma Complicated by Associated Injuries; Harry E. Mock, M.D., Chicago, Illinois.
11:45 to 12:00—Discussion.
12:30 to 1:45 p.m.—Luncheon and Round Table Discussion; J. E. M. Thomson, M.D., presiding.
Afternoon Session—John A. Brown, M.D., Secretary-Treasurer of the Lancaster County Medical Society, presiding.
2:00 to 2:30 p m.—Progress of Research on Poliomyelitis; H. M. Weaver, Director of Research, National Foundation for Infantile Paralysis.
2:30 to 2:45 p.m.—Discussion.
2:45 to 3:00—Recess.
3:00 to 3:30—The Diagnosis of Pheochromocytoma and the Use of Hexamethonium and Apresoline in the Treatment of Essential Hypertension; Walter F. Kvale, M.D., Mayo Clinic, Rochester, Minnesota.
3:30 to 3:45—Discussion.
3:45 to 4:15—Lung Surgery; William M. Tuttle, M.D., Detroit, Michigan.
4:15 to 4:30—Discussion.
5:45 to 6:45—Social Hour.
6:45 to 9:00—Banquet; Frank H. Tanner, M.D., President of the Lancaster Medical Society, presiding; Speaker—W. W. Bauer, M.D., Director of Health Education for the American Medical Association.

(The ladies are urged to attend).

For those physicians who may be in the Deep South this month: A Sectional Meeting of the American College of Surgeons will be held in the Biltmore Hotel, Atlanta, Georgia, Febr. 23-24. The papers, panel discussions and symposia cover a variety of interesting subjects, presented by men of national repute. Write Greer Williams, Director of Public Relations, 40 East Erie St., Chicago 11, Illinois, for details.

The Poynter Lecture and the Postgraduate Assembly at the University of Nebraska College of Medicine, Omaha, will be presented on March 24, 25 and 26, 1953. Besides Dr. David Ivan Rutledge of the Lahey Clinic, other nationally recognized speakers will present topics in medicine, surgery, pediatrics, obstetrics, gynecology, neuropsychiatry and anesthesiology.

Qualifying examinations for Fellowship in the International College of Surgeons will be held on the following dates in 1953: Febr. 2-3; May 4-5; Aug. 10-11, and Nov. 2-3, at the Cook County Graduate School of Medicine and the Cook County Hospital. Address communications to Harry A. Oberhelman, M.D., 1516 Lake Shore Drive, Chicago 10, Illinois.

The University of Colorado School of Medicine, Division of Graduate and Post-Graduate Education, announces a course in Applied Medical Science for the winter (Jan. 5 to March 14), and spring (March 23 to June 8) quarters. This is open to candidates who have the degree of Doctor of Medicine and who have had a one-year internship in an approved hospital, and to certain others. The course is so arranged that one may take all or part of it. For instance, the portion concerned with Water Balance is from Jan. 5th through Jan. 10th, etc. During the Winter Quarter, the following subjects will be covered: Water Balance, Gastrointestinal Tract, Metabolism, Circulation, Respiration, Kidney, and, Endocrine Glands. For further information, communicate with Dr. Joseph H. Holmes, 4200 East 9th Ave., Denver, Colo.

The New York University Post-Graduate Medical School, Department of Medicine, offers the following post-graduate courses: Symposium on Modern Therapeutics in Internal Medicine, June 15th through 26th, 1953; and, Cardiology, June 29th through July 24th, 1953. For application and information write: Office of the Dean, C-6, New York University Post-Graduate Medical School, 477 First Ave., N.Y., 16, N.Y.

The Eighth National Conference on Rural Health, sponsored by the American Medical Association Council on Rural Health, in cooperation with the national farm organizations, will be held in the Roanoke Hotel, Roanoke, Virginia, February 27-28, 1953. Write F. S. Crockett, M.D., Chairman of the Council on Rural Health, 535 N. Dearborn St., Chicago 10, for information.

The Second Annual Tuberculosis Symposium for General Practitioners will be held at Saranac Lake, New York from July 13 through 17, 1953. It is approved by the American Academy of General Practice for 26 hours credit for its members. The symposium is sponsored by the Saranac Lake Medical Society and the Adirondack Counties Chapter of the New York State Academy of General Practice. The registration fee is forty dollars for A.A.G.P. members and fifty dollars for non-members. Registration is limited to 100. Complete information can be obtained by writing Richard P. Bellaire, M.D., P.O. Box 707, Saranac Lake, N.Y.

Woman's Auxiliary

POLIO COMMITTEE MEETING

Mrs. James Donelan, president-elect, and Mrs. J. J. O'Neil, president of the Douglas County Auxiliary, represented the Woman's Auxiliary to the Nebraska State Medical Association at a meeting of the Women's Committee of the National Polio Foundation in Omaha, January 9. The guest speaker was Mrs. Beatrice Wright, a member of the Public Relations and Education staff of the Foundation. Mrs. Wright is the widow of a Michigan doctor. She herself contracted a very crippling form of polio in 1949 but has carried on with her work as a most effective speaker in the interests of the Polio Foundation.

Mrs. Wright pointed to Nebraska's great responsibility in the March of Dimes campaign this year. In 1952 Nebraska had the greatest incidence of polio per population of any state in the United States. The Foundation sent 150 thousand dollars, 104 iron lungs, and 54 nurses and therapists into our state.

The results of the tests with Gamma Globulin in Sioux City and in Texas demonstrated the effectivenes of Gamma Globulin. No children who were injected with G.G. had a crippling form of polio or died. However, the supply will not be sufficient to meet the demands. By the first of July there will be only enough for 1,500,000 injections, and it will be allocated by the Research Council of the National Polio Foundation to epidemic areas.

CONVENTION COMMITTEE MEETING

The Convention Planning Committee for the 1953 Annual Meeting of the Woman's Auxiliary to the Nebraska State Medical Association to be held in Omaha, May 11-14, will meet at the home of Mrs. James J. O'Neal, chairman, in Omaha, February 4. Members of the committee are Mrs. O'Neal, Mrs. R. E. Garlinghouse, Mrs. Hiram Hilton, Mrs. Kenneth Muehlig, Mrs. T. T. Smith, and Mrs. Henry Kammendal. Mrs. James Donelan and Mrs. Isaiah Lukens were also invited to attend the meeting. The program for your state meeting will be present in the March Journal. Look for it.

PAY YOUR DUES NOW

The program of the auxiliary, from the national to the county level, is dependent on the cooperation of the individual member. The work outlined for 1953 can not be done without the financial help of each member. It is, therefore, highly important that dues be paid promptly.

Of the total amount of dues you pay to your county treasurer, one dollar goes to the national and two dollars to the state auxiliary. The balance is used to carry on the program in your county chapter.

In order to be active members in the national auxiliary your dues must reach your state treasurer by March 1. The representation at the state and national meetings can be only by active members. In order to take part in the policy-making of our organization, it is necessary that we be active members.

Please pay your dues on time and thus help your auxiliary to carry out the very important work it has set out to do this year.

SPOTLIGHT ON TODAY'S HEALTH

Our goal for this year is a copy of "Today's Health" magazine in every physician's waiting room in Nebraska. The way we hope to achieve this goal is by having each doctor's wife check the magazines coming in and send a subscription or renewal to her County Auxiliary's Today's Health Chairman or to me if there is no Auxiliary in her county.

"Today's Health" serves a number of important functions. First, it is published especially for the lay public by the A.M.A. and hence is written in language which the average person can understand. Furthermore the materials are presented in a colorful and interesting manner. Secondly, it can serve as an effective weapon in the fight against socialized medicine, as it tells exactly what the doctors of the nation are doing for the public in the way of supporting privately sponsored health plans and in their untiring and unselfish research to combat diseases. It is impossible to estimate the untold benefits derived from the authentic health information contained in each issue of "Today's Health." The general public is more eager for health information than ever before; what better way to receive this information than in the doctor's office from the authoritative pages of "Today's Health."

We have only three more months until the 1952-53 contest ends (April 30, 1953). Contest rules are in the hands of each county chairman. Let's all get out and see how widely we can distribute our magazine. The schools provide our most fertile field of endeavor; a gift subscription from the County Auxiliary to each school in the area is an excellent way to disseminate authentic health information. Gift subscriptions to the teachers provide thoughtful and inexpensive remembrances. For that matter "Today's Health" provides an excellent gift for any of our friends, new mothers, or even the beauty shops in our communities.

Special rates are available to all physicians, Auxiliary members, and dentists. These special rates also prevail when any of the above give "Today's Health" as a gift. The rates are as follow:

	To Laymen	To Physicians
One Year	$3.00	$1.50
Two Years	5.00	2.50
Three Years	6.50	3.25
Four Years	8.00	4.00

Reduced rates are available also for student groups or groups of 100 or more persons.

Nebraska's showing in the past has been very poor. Let's go over the top this year and make our state the number one in the nation in the distribution of "Today's Health," for not only will we be helping ourselves but we will be providing a real service for the public.

For Counties in which there is no organized auxiliary subscriptions may be sent directly to "Today's Health," 535 North Dearborn Street, Chicago, Illinois, requesting that our State be given credit for the subscription. Or subscriptions can be sent to Mrs. Paul Marx, 2505 South 24th Street, Lincoln, Nebraska.

BETTY MARX.

The Grand Island Medical Auxiliary, Tri-County I, met December 17th. They made plans to buy a record player for the St. Francis Hospital pediatrics ward. Each member also brought a gift to present to the pediatric patients in both St. Francis and Lutheran hospitals on Christmas day.

The Fillmore-Saline County Medical Society and auxiliary met in December at the Friend American Legion Hall.

Dinner was served by the auxiliary of the American Legion and music was furnished by a sextet from Friend high school.

Dr. R. K. Johnson of Friend was in charge of arrangements.

Dr. and Mrs. R. P. Luce of Fairbury invited friends to open house at their home on January 4th in observance of their twenty-fifth wedding anniversary.

The January meeting of the Adams County Medical Auxiliary was held at the Hastings State Hospital.

Mrs. O. A. Kostal, chairman of nurse recruitment for Adams county, discussed plans to encourage high school girls to enter nurse's training.

Mrs. Kostal personally has distributed throughout Adams county, over 200 calendars with a picture of a nurse being capped. These calendars were placed in churches and schools.

The Women's Auxiliary to the Douglas County Medical Society met on Tuesday, January 13th at the Omaha Athletic Club for a one o'clock luncheon.

Guest speaker at the luncheon was Miss Marion Marineau of the Omaha Hearing school. Miss Marineau demonstrated teaching methods used with youngsters at the school.

Mrs. R. E. Lovgren was program chairman and hostess at the luncheon was Mrs. T. T. Smith.

Scottsbluff County Medical Auxiliary has elected the following officers for the year 1953:

President—Mrs. Frank Herhahn
Vice President—Mrs. Paul Baker
Treasurer—Mrs. Rush Karrer
Secretary—Mrs. O. A. Prentice
Courtesy Chairman—Mrs. Ivan Lovett
Nurse Recruitment Chairman—Mrs. Otho Brown

At Christmas time the Scottsbluff auxiliary presented St. Mary's Hospital with a cash donation.

A lace table cloth was presented to the Nurse's Home and 14 towels and 7 wash cloths were given to the West Nebraska Methodist Hospital.

A cash donation was also given to the Handicapped Children's School.

Lancaster County Medical Auxiliary met at Bryan Memorial Hospital for a one o'clock coffee-sandwich luncheon on January 5th.

Guest speaker was Dr. Howard Mitchell who spoke about the cerebral palsy unit at the Orthopedic hospital.

Hostesses for the luncheon were Mrs. F. L. Rogers and Mrs. P. D. Marx. Assisting hostesses were Mrs. S. L. Wolters, Mrs. R. C. Olney, Mrs. R. F. Mueller, Mrs. H. S. Morgan, Mrs. S. D. Miller, Mrs. P. J. Maxwell, Mrs. H. W. Orr, Mrs. H. B. Miller, Mrs. K. T. McGinnis and Mrs. G. W. Misko.

Approximately eighty dolls were given to the Family Service of Lincoln by the Lancaster County Medical Auxiliary. Each member of the auxiliary brought a doll to the December dinner dance to be given to the Family Service for distribution among needy children in Lincoln.

BIRTH ANNOUNCEMENTS

Dr. and Mrs. Robert House of Grand Island are parents of a son born December 18th.

Dr. and Mrs. J. A. Proffitt of Grand Island announce the birth of a son on December 9th.

Nebraska State Department of Health

The summary of reports on corrections of remediable defects of the school age child is being sent to all County, City and Parochial superintendents in Nebraska. These are the result of teacher and nurse observations and screening; recommendations to parents; examinations by physicians and dentists, and the cooperation of parents in following up the findings of physicians and dentists. These reports are for the school year 1951-1952.

Seventy-seven counties reported corrections to the State Department of Health on blanks provided for this purpose. Sixteen counties sent in no report.

The sumary of corrections is as follows:

Eyes	10,134
Ears	1,457
Nose and throat	4,285
Teeth	37,543
Other defects	2,325

Many schools have had immunization programs for the children who have entered school since the last immunizations were given.

These numbers are:

For diphtheria	9,506
For smallpox	6,753

CHEST X-RAY UNITS AT WORK

The chest x-ray units owned and operated by the State Health Department are well on their way over the state in the second series of visits in county surveys.

It is estimated that the units have served about one-half of the population of the state in the counties visited in this second round.

The mobile unit (carried in a bus) operated in Dodge County in January, and will be offered to the following counties in order: Colfax, Platte, Boone, Wheeler, Garfield, Sherman, Buffalo, and Hall.

The transportable unit (operates in a building) operated in Adams County in January, and will be offered to the following counties: Kearney, Franklin, Harlan, Phelps, Gosper, Furnas, and Red Willow.

Know Your Blue Shield Plan

In the address reprinted below, Doctor Baumgartner gives an excellent analysis of some of the problems facing non-profit prepayment plans, as well as a clear picture of the economic relationship between Blue Cross-Blue Shield and the medical profession. We hope every member of the Nebraska State Medical Association will read this article, because, if we are going to make the voluntary way work, we must have the full understanding and cooperation of the medical profession.

ARTHUR J. OFFERMAN.

BLUE CROSS - BLUE SHIELD AND THE DOCTOR*

ELDEN C. BAUMGARTEN, M.D.
Detroit, Michigan

The idea of insurance against unpredictable illness and disability is not a new one. Records show that in the seventeenth and eighteenth centuries some such efforts were made. Everyone is acquainted with the German "Krankenkassee" under Bismarck. The Scandinavian countries have long had some type of sickness protection, largely operated by the government. About the first instances that in any way simulated Blue Cross or Blue Shield as we know it today were some abortive attempts in Oregon and Washington in the 1920's. California, in 1939, I believe, was the first to put into successful operation such a plan. Michigan, in 1940, and many others followed in rapid succession. The idea has swept over the entire nation and some of the territories, there being in existence now some 78 plans in 44 states.

WHAT BLUE CROSS AND BLUE SHIELD ARE

Now, what is there unique about Blue Cross-Blue Shield that it has swept the whole country like a storm? No commercial endeavor that I am aware of has made such vast strides in such a short period —about 12 years. Commercial insurance companies have assumed enormous proportions, but it has been by a slow and tedious process. They have realized the possibilities of some type of sickness insurance, but are notoriously reluctant to assume risks that cannot be supported by actuarial figures and experience tables; and they had very little of this information until the trial and error method of a pioneering Blue Cross and Blue Shield made it available.

To answer this question, then, most of us must change our concept of what Blue Cross and Blue Shield are. Certainly, we all remember the hectic thirties, when this nation passed through the most devastating depression in all its history. Jobs, money, and credit were nonexistent, and the thing that concerned you and me was the sick man, woman, or child who could not avail himself of hospital and medical services because of a lack of funds. It is true, doctors could and did give their services and received remuneration only when and if possible. Hospital bills, however, had to be paid. It is an undeniable fact that the American people, have always risen to the demand in times of need. And so it was in this time of need and near disaster: American medicine — accepted the challenge and gave birth to the device known today as Blue Shield.

We must, therefore, stop thinking of this device as just another insurance company, and consider it as part and parcel of a great social movement involving many other lines of endeavor than our own. Fortunately, it is evolutionary rather than revolutionary in nature. To me, it is a way of life; it is a new way of living. Our particular part of this great social change may well be compared with the labor movement of recent times. It too was a response to the demands and necessities of the people, and, although its history has been marked by actual violence at times, I am sure that in the end the benefits derived therefrom will justify the means.

Any radical change in our habits and modes of living is certain to result in trouble and conflicts, assuming at times almost the proportions of chaos. And so it has been with Blue Shield. The amazinly rapid growth of Blue Shield, I am sure, attests to the soundness of the theories and principles upon which it is founded, but it has also resulted in what at times appear to be almost insurmountable barriers and obstacles. Witness the multiplicity of plans, duplication of efforts in small areas, inter-plan quarrels, intra-plan disputes, and hospital, physician, and patient abuses. But out of this chaotic state, I am sure, ultimate order will be achieved. A general pattern will be evolved, very likely on a statewide level, which will vary in minor details only because of geographic location or local social and economic conditions, and a national organization in which all others can participate will emerge. Such an organization, as you know, is well under way.

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*Reprinted from the North Carolina Medical Journal, Vol. 13, No. 6, pp. 278-282, June, 1952.

The importance of Blue Shield in our national life, and its power as a weapon for social reform, may well be judged by its impact on other forces and agencies. For example, it is no secret that the national Administration has gone to great length in effort and expense to force upon the American people a type of socialistic medical practice, and in its propaganda to discredit the Blue Cross and Blue Shield idea. In spite of the unlimited funds available for this purpose, we are hearing less and less of Mr. Ewing, and Blue Cross - Blue Shield enrollment is increasing at an incredible rate. Mr. Truman recently appointed what is commonly called the Magnuson Committee. The function of this committee is rather obscure, except that it is to make a survey of all other surveys to determine whether any further surveys are necessary. In my personal opinion — which I believe is shared by others — this committee is a subtle device to get someone off the hook and leave the committee holding the bag.

Another example is the interest of labor and management in our plan. Labor is repeatedly using Blue Cross - Blue Shield or similar ideas in its bargaining with management, and the latter is more and more coming to regard it as a necessary agency in better labor relations. Both parties are represented on Boards of Directors and give unstintingly of their time to improve and extend its scope of operations. Commercial carriers are scrambling to write similar protection at competitive rates, and profiting by our hard won experience.

Probably the most striking effect was that extensively discussed by several speakers at the recent San Francisco conference: the rapid and alarming decrease of clinical material in teaching institutions. This was attributed entirely to the fact that the American people would rather avail themselves of Blue Cross and Blue Shield protection at a cost commensurate with their income than to become the recipients of charity in a university hospital ward. There are other examples too numerous to mention.

PURPOSE AND OBJECTIVES

Now that we have defined what Blue Cross and Blue Shield really are, we should be able to define as clearly what are or are not their objectives, what is or is not their real purpose. First, let me enumerate three items which these agencies ar not:

1. It is definitely not a primary objective of Blue Cross - Blue Shield to defeat "Ewingism" or socialized medicine. If that is achieved — and I'm sure it will be — that result will be purely a by-product, like a gas recovered from a chemical reaction: a valuable product to be sure, but entirely ancillary to the primary reaction.

2. Blue Cross is not a method of subsidizing poor hospital management. Many hospitals have availed themselves of the opportunity to improve their financial status at the expense of Blue Cross by devious methods of bookkeeping and cost accounting, unreasonable markup on drugs, supplies, and services. How widespread this abuse is, no one knows. That it exists, is certain. This will very likely be corrected and must be corrected by uniform systems of accounting and auditing.

3. Blue Shield is not an agency to insure every doctor's fee for every service he renders. Its purpose is most definitely not to insure him against all bad accounts and assure him of 100 per cent collections.

There is one and only one real objective of Blue Shield: to assure Mr. and Mrs. Average American and their children adequate hospital and medical care at a price they can afford to pay. Do this one thing well and the blessings accruing therefrom will be given unto you.

You will note that our one objective readily breaks down into two components: (1) Adequate hospital and medical care; (2) at a price people can afford to pay.

"ADEQUATE HOSPITAL AND MEDICAL CARE"

Let us examine and further break down the first objective. I use the term "adequate" advisedly and in the exact meaning of the word as I understand it — namely, sufficient, not necessarily complete, without frills or window dressings or trimmings. This first component is undoubtedly the more important of the two, because any slight variation or modification has a direct and determining effect on the second. Many will not agree with me on this point and will not be satisfied until we can substitute the word "complete" for "adequate." I do not believe that (1) such a thing is feasible, or (2) the people want it. I have great faith in the pride of most of our citizens. They want to stand on their own feet, pay their bills with no strings attached. They buy automobiles and insure them. Do they insure them to the extent of complete protection against every slight damage that may occur? They do not. They feel that for the ordinary scratch on the paint or dent in the body they themselves can easily provide. It is the more serious damage they must protect themselves against, and why is this? Because the cost is prohibitive.

The same thing is true of medical care. I am sure that the great majority of people are willing to pay the cost of ordinary minor illnesses, the occasional house call or office call, and even the ordinary run of diagnostic procedures; but it is the more serious illnesses, surgical operations and long hospital confinement that is frightening and may upset the family economic status for a lifetime. There are many other angles and facets as to what constitutes adequate medical and hospital care which we cannot go into at this time, such as care of the indigent, the retired, and the unemployed.

". . . AT A PRICE PEOPLE CAN AFFORD"

The second component of our objective is "at a price people can afford to pay." I do not know what that price is; I don't believe anyone does. Many complicated studies have been conducted to determine this question, and the most common report is that people can't afford to pay anything for the cost of illness. This, of course, is absurd, as proved by the millions of dollars that have been poured into Blue Cross - Blue Shield treasuries for medical services.

THE QUESTION OF COSTS

Of one thing I am sure: I am convinced that the present premium rates are about as high as they can go without discouraging new subscriber enrollments. Hence, we have only one alternative: reduce the costs. There are three factors which influence cost: (1) efficient management; (2) utilization of benefits; and (3) abuse of utilization. With the first we are not concerned at this time. What normal utilization is has never been accurately defined, but it is extremely sensitive to stimulus. Increase contract benefits and utilization figures will make some violent responses, as I shall show later. This can be largely controlled by additions to or substractions from the benefits. It should not be necessary to control utilization, because, as stated before, that is our main objective — to give necessary and adequate care; and it would not be necessary to exercise rigid controls were it not for the abuses that always follow liberalization of benefits. We want our subscribers to use our facilities, but to abuse that privilege may spell disaster.

THE PROBLEM OF ABUSES

There are four elements that enter into the problem of abuses:

1. Blue Cross - Blue Shield themselves
2. Hospitals
3. Patients
4. Doctors

The first two elements already have been alluded to and constitute a long story in themselves, but the present discussion will be confined to the latter two — patients and doctors. They are inseparable, and one without the other cannot consummate abuse.

For example, Mr. Smith, who has a combined contract, goes to see Dr. Jones, a participating physician. Little Johnny has tonsilitis. Dr. Jones prescribes treatment, but Mr. Smith feels that Johnny should be in the hospital, because mother isn't feeling too well and there are grandma and grandpa at home to take care of. Incidentally, Mr. Smith has had a little gas on his stomach and would like a complete checkup, with x-rays and perhaps a cardiogram. Morover, he and Johnny could be in the same room and all would be nice and cozy. Dr. Jones explains that, in the first place, it isn't necessary to go to all that trouble and, in the second, the Blue Cross - Blue Shield contract does not cover all these items. "Well," says Mr. Smith, "Dr. Brown did all this in the hospital for my neighbor, and if you don't do it for me, I'll have to see Dr. Brown."

Dr. Jones doesn't feel quite right about the matter, but he just can't see his nearest competitor taking over one of his old time families, and anyhow it is only one case; so it is agreed that Mr. Smith and Johnny are to be hospitalized. Just as Mr. Smith is walking out of the door, he turns and says: "Say, doctor, I just got a notice from Blue Cross - Blue Shield saying that the rates for my certificate are going up a dollar a month. That's a 20 per cent increase and the third one in two years. If these rates go any higher, I'll have to drop the insurance." Dr. Jones muses a moment. "A 20 per cent raise, and the third in two years. That's a lot. Oh, well, that's none of my business. Let those Blue Cross-Blue Shield fellows worry about that. Anyhow, what's insurance for?"

If Mr. Smith and Dr. Jones were alone in this matter, little damage would come of it. Multiply these two by a hundred, and there is sure to be trouble. Multiply them by the thousand, and disaster is certain.

Now Mr. Smith and Dr. Jones are both parties to a violation. The patient's attitude is understandable. After all, he has paid his subscription rates and he wants his money's worth, but he has not read the certificate he holds and wouldn't understand it if he did. Dr. Jones, however, is a Blue Shield participating physician. He knows, or should know, the rules. He is in the same position as an attorney-at-law. He is an officer of the court and sworn to adhere to and observe the laws regardless of his sympathies toward his client.

UNNECESSARY HOSPITALIZATION

About a year ago, I became interested in the question of Blue Cross abuse by physicians. I made a rather cursory study of the situation in our hospital, a 185-bed institution. The results were revealing. I found that there were 26 patients who had been in the hospital two weeks or longer. Of these 26, 19 had Blue Cross coverage. I studied the charts of these 19 carefully, and in my opinion only 3 had, by any stretch of the imagination, a good reason to be in the hospital, and all 16 remaining were ambulatory.

Five were patients with casts of some sort for fractures; several were waiting for cast changes and x-ray checks a week or 10 days hence. Three were diabetic patients under control, 2 of whom were there because they felt they had no better place to go. Two were ambulatory cardiac patients, well compensated. One had had a tonsillectomy and was later to have a hemorrhoidectomy, but was biding his time and resting in the hospital because his surgeon could not get a boarding for another week. Two were postoperative patients getting dressings every other day. One was receiving x-ray treatments for a sub-acromial bursitis. One was a man, 80 years old who was irrational and incontinent, and had been brought in because the family wanted to spend a Merry Christmas without the trouble of having grandpa around. One had a cirrhosis of the liver and was having a paracentesis done every 10 days. One had so-called rheumatoid arthritis, and was being treated with cortisone.

This last case was to me the most flagrant instance of abuse on record. The physician had unwittingly documented it perfectly and signed it. He had written 10 orders for leave of absence from the hospital. One was to attend a banquet at the Statler Hotel and several were for entire weekends at home. This case cost Blue Cross $733.00 and Blue Shield $106.00. The patient was in the hospital 32 days.

After gathering this information, I went before a staff meeting the following day with some rather pertinent statements. By noon, we had 15 discharges.

There were other types of abuses. Orders had been written for expensive antibiotics in large doses and multiple varieties, and never discontinued. Large numbers of unrelated laboratory tests were ordered, seemingly to make an impressive appearance on the chart. Prescriptions for expensive drugs were written and filled for the patient to take home and charged to Blue Cross. Fictitious admitting diagnoses were made to get the patient admitted for prolonged diagnostic workups, and so on almost indefinitely.

FURTHER EXAMPLES OF ABUSE

This rather superficial study was followed by a more detailed study made at a much larger hospital. The following findings were reported:

The committee reviewed 1,276 cases of patients admitted to the hospitals during the month of January, 1951. These cases were studied in regard to age, admitting diagnosis, length of stay in the hospital prior to surgery, complications, findings at surgery, treatment while in the hospital, discharge diagnosis and length of stay in the hospital. As a result of this review of individual cases, the following findings were reported:

1. Sixty patients took up 560 hospital days for diagnostic purposes only. The investigative studies on these cases could have been done either at the doctor's office or at an out-patient clinic. In addition, there were 16 cases, involving 165 hospital days, that did not require hospitalization for any apparent reason.
2. Sixteen patients took 393 hospital days for roentgen therapy and physiotherapy only.
3. Twenty-four patients took up 133 hospital days in unnecessarily long pre-operative preparation.
4. Twenty-four patients took up 167 hospital days in unnecessarily long post-operative stay.
5. Twelve medical patients took up 155 unnecessary days in prolonged medical care.
6. Nine orthopedic patients took up 47 hospital days while ambulatory and not needing hospitalization.
7. Some patients were admitted under a false acute diagnosis in order to get the patient into the hospital for a checkup.

The above findings represent a misuse of approximately 1,700 hospital days for one month or approximately one sixth of the capacity of the hospital.

To me, this situation is alarming. Certainly there is evidence of gross carelessness and negligence, and some downright dishonesty. Some actuaries do not feel that it is very important, because if one patient moves out of a bed, another moves in, and it makes no difference who the current occupant may be. I am hoping, however, that we may eventually again see an empty bed.

PROFESSIONAL RESPONSIBILITY

Now, what can doctors do about this? I'm sure I do not know the answer, but I have some ideas on the subject. If what I have said about the fundamental nature of Blue Cross - Blue Shield is true, what I shall say now may be of some help in this situation.

We have suddenly found ourselves projected into an activity that is of most vital concern to us, and upon its failure or success depends our profession, our personal welfare, and maybe our very existence. That being true, it behooves us to assume a strong leadership and guide this most potent agency into proper channels, in the right direction that its usefulness may be preserved for the people and, incidentally, that we may reap our own salvation. It is like a religion, and at the moment I can see the necessity for a lot of converts. Each one of us individually is due for a searching, critical, self-examination.

Have we, the ones who must be the leaders, been entirely above reproach? If so, it at once becomes our duty as individuals and as a group to preach the gospel of Blue Cross - Blue Shield for what they are, to our less well informed colleagues. From experience, I can tell you, it is not easy. The treatment must be applied time and time again before appreciable results will become apparent. How you do it will be a matter of local expediency. I am sure that the prosecution of one individual or the acceptance or rejection of a single case is not the answer. The answer lies in a planned program to bring about, within the medical profession, realization of the significance of Blue Cross and Blue Shield as social programs, and the very important role it must play in their successful operation. The problem can be dealt with only through the medium of a carefully planned and consistent approach to the doctors.

Deaths

Dr. Edward T. Gerin, 43, formerly of O'Neill, Nebraska, died in a Norfolk Hospital on December 21, 1952. Dr. Gerin was a graduate of the University of Nebraska College of Medicine, and after spending eight years in Lincoln, Nebraska, moved to O'Neill in September, 1951.

Dr. Henry John Lehnhoff, 81, of 2804 Sheridan Blvd., Lincoln, Nebraska, died Tuesday, December 16, 1952 after a long illness. Dr. Lehnhoff was past president of the Lancaster County Medical Society as well as the Nebraska State Medical Association, and was also a member of the National Federation of Secretaries of Examining Boards. He was a graduate of Northwestern University College of Medicine in 1901 and was one of the three physicians who founded the Lincoln Clinic in 1914.

Dr. L. H. Sixta, 85, died Tuesday, December 16, 1952. Dr. Sixta received his M.D. degree from University of Chicago in 1889 and practiced medicine in Chicago from 1890 to 1897. From this time until his retirement in April, 1946, he practiced in Schuyler, Nebraska.

Dr. W. H. Caulk, age 97, died Sunday, December 28, 1952. Dr. Caulk was a graduate of the Medical School in Keokuk, Iowa in 1881 and had practiced in several towns including Cairo, Reynolds and Lincoln.

Dr. W. Rork, age 80, died in Hastings, Nebraska, suddenly apparently of coronary disease on Wednesday, December 31, 1952. Dr. Rork graduated from the University of Maryland in Baltimore in 1896 and practiced medicine in Nebraska 52 years. He moved from Oxford, Nebraska to Hastings in 1923 where he had specialized in radiology since that time.

Dr. Ben Edward Ewing, age 36, died suddenly at his home, 1302 4th Avenue, Nebraska City, Nebraska, Sunday, December 28, 1952. Dr. Ewing graduated from the University of Nebraska Medical School in 1939, following which he interned at the Immanuel Hospital in Omaha before going to Nebraska City in 1940. Dr. Ewing served in World War II as a Captain in the 221st Medical Dispensary and was overseas from January, 1944 to November, 1945. He served in Central Europe, Northern France, Rhineland and the Ardennes Campaigns.

Dr. John Dwight Davis died after a long illness in the Veterans Hospital at Long Beach, California, December 15, 1952. He was a graduate of the University of Nebraska with an A.B. degree in 1919, following which he entered the University of Illinois College of Medicine and graduated from there in 1922. Following a year's internship at the Seatle City Hospital, he located with Dr. Homer Davis, his father, in Genoa, Nebraska. In 1929 he moved to Los Angeles, California where he was in practice until the time of his death.

Human Interest Tales

Comunications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. Loran Grubbs, Mitchell, has moved his offices to the Reed building.

Dr. Roy Matson, Wayne, has been reappointed county health officer.

Dr. C. M. Pierce, Chadron, has resigned his post as city physician after 30 years of service.

Dr. James E. Ramsay, Atkinson, is now occupying his new office building.

Dr. R. A. Flebbe, Sutherland, was recently elected President of the local Commercial Club.

Dr. O. A. Kostal, Hastings, has been chosen President of the Nebraska Chapter of the Navy League.

The sympathy of the Journal is extended to Dr. E. A. Watson, Grand Island, on the death of his wife.

Dr. Donald C. Nilsson, Omaha, was recently elected a Fellow of the American Academy of Pediatrics.

Dr. Edward Hanisch, Jr., St. Paul, has moved to Belle Fourche, S.D., where he has established his practice.

Dr. C. W. Neill, South Sioux City, was injured in a highway accident near Hartley, Iowa, on Christmas day.

Dr. and Mrs. H. M. Harvey, Gothenburg, have donated x-ray equipment to the Gothenburg Memorial Hospital.

Dr. John E. Hartsaw, formerly of Fullerton, is now associated in practice with Dr. Kenneth Dalton in Genoa.

Dr. Adolph Sachs, Omaha, was guest of honor at a Christmas dinner for members of the St. Joseph's Hospital staff.

Dr. and Mrs. J. B. Redfield, North Platte, spent the Christmas holidays visiting relatives in Corpus Christi, Texas.

Dr. Charles Tompkins, Omaha, was guest speaker at a meeting of the Omaha YWCA and the Parents' Club, January 8.

The Journal wishes to express its deep sympathy to Dr. E. B. Reed, Lincoln, whose mother passed away January 6.

Dr. C. H. L. Stehl, Scribner, returned from a deer hunt in the northwestern part of the state with a fine yearling buck.

Dr. E. H. Reeves, Arnold, has returned home after receiving hospitalization and medical attention in Rochester, Minn.

Dr. Henry Dworak, Omaha, has been chosen coroner's physician for Douglas County. He succeeds Dr. Frank J. Iverson.

Dr. Paul DeOgny, long time Milford physician and more recently of Lincoln, has announced his retirement from practice.

Sympathies of the Journal are extended to Dr. Gerald Kuehn, Hastings, whose father recently passed away in California.

Dr. Howard B. Hunt, Omaha, is Vice Chairman of the Commission on Hospital Standards of the American College of Radiology.

Dr. Herbert H. Davis, Omaha, recently told the local Rotary Club about the advances made in the handling of surgical cases.

Dr. John Tyson, manager of the Omaha Veterans Hospital, has been named president-elect of the Omaha Area Hospital Council.

Dr. F. A. Barta, Ord, was honored at ceremonies held in mid-December for his 20 years of service to the high school's athletic teams.

Dr. Lawrence Ruzicka, a 1940 graduate of the University of Nebraska College of Medicine, is now practicing in Concordia, Kansas.

Dr. Lawrence Morrow, Tekamah, is the new President of the Burt County Medical Society. Dr. L. E. Sauer, Tekamah, is Vice President.

Dr. Roy J. Smith, Albion, recently recommended that fluorine be added to the local water supply. Dr. Smith is Albion's city physician.

Dr. George F. Simanek, Omaha, received a broken hip and wrist in early January. He was injured in an accident at the home of a patient.

Dr. and Mrs. R. P. Luce, Fairbury, recently celebrated their 25th wedding anniversary. An informal reception was held in their honor, January 4.

Dr. L. E. Dickinson, Sr., Ravenna, was appointed by Former Governor Val Peterson to represent Nebraska at the World Medical Association meeting in Richmond, Va., April 23-25.

Dr. Cecil Wittson, Omaha, has been elected President of the Nebraska Society of Neurology and Psychiatry. He also was named as councilor of the regional neuropsychiatric organization.

Dr. Russell Best, Omaha, has been selected assistant director of the medical division of the Omaha civil defense organization. He was appointed by Dr. George Johnson, Omaha, director.

Dr. Maurice D. Frazer, Lincoln, is councilor for the Rocky Mountain area of the American College of Radiology. He is also a member of the college's Commission on Legislation and Public Policy.

Dr. A. D. Brown, Central City, was recently appointed to the Hord Memorial Hospital board. He is to fill the unexpired term of Dr. E. T. Zikmond, Central City, who has been called into the service.

Dr. S. I. Fuenning, Lincoln, is the new President-elect of the Nebraska Public Health Association. Dr. L. G. Woodin, Grand Island, has also been named chairman of the Health Officers section of the association.

Dr. N. Chick, North Platte, is the new President of the Lincoln County Medical Society. Others elected were Dr. James Carroll, Vice President, and Dr. S. A. Kerkhoff, Secretary-Treasurer, both of North Platte.

The Orthopedic and Fracture Clinic of Doctors H. Winnett Orr, Fritz Teal, Howard E. Mitchell and Frank P. Stone moved into their new "clinic" building at 2300 South 13th Street in Lincoln, on December 1st, 1952.

Dr. A. P. Synhorst, Grand Island, has been elected President of the Hall County Medical Society. Other new officers are Dr. Donald Watson, Vice President, and Dr. Richard DeMay, Secretary-Treasurer, both of Grand Island.

Dr. G. W. Graupner, Grand Island, has been elected President of the St. Francis (Grand Island) Hospital staff. Other new officers are Dr. John Campbell, Vice President, and Dr. Warren Bosley, Secretary, both of Grand Island.

Dr. J. E. Nordstrom, who practiced in Shelton with Dr. C. E. Wiltse until called into the service, has returned from Korea and is now stationed at Ft. Sam Houston, Texas. He expects to be released from service in early June.

Dr. J. P. Brown, O'Neill, has been elected Chief-of-Staff of the Sisters of St. Anthony's hospital in O'Neill. Other officers elected were Dr. W. F. Finley, Assistant Chief-of-Staff, and Dr. Rex W. Wilson, Secretary. Both practice in O'Neill.

Dr. Philip Sher, Omaha, has written a book based on his more than 50 years of practice. He has announced that proceeds of the book, to be published by a New York publisher, will be given to the Damon Runyon Cancer Fund, the Medical School of Israel Cancer Fund, and Children's Memorial Hospital in Omaha.

Dr. L. J. Owen, Lincoln, was a member of the Pan-American Medical Congress Cruise which embarked from New York on January 7 and returned January 19. Dr. Owen was a guest lecturer on the cruise, which touched ports in South America, Panama, Cuba and Haiti. Mrs. Owen and their daughter, Celia, accompanied Dr. Owen on the trip.

New officers of the Lancaster County Medical Society are Dr. Frank H. Tanner, President; Dr. Everett E. Angle, President-elect; Dr. E. Burkett Reed, Trustee, and Dr. Frederick D. Coleman, Trustee. Dr. John Brown was re-elected Secretary-Treasurer. All these physicians are from Lincoln. Dr. Harold S. Morgan, Lincoln, is the retiring President.

Dr. Herman F. Johnson, Omaha, was guest speaker at the University of Kansas Medical Center on November 20. His topic was "An Analysis of Bone Tumors Over a 20 Year Period." Dr. Johnson was also a guest lecturer at the A.M.A. Clinical Session in Denver last month. The title of this paper was "Complications of Fractures of the Extremities."

Four Lincoln physicians, Drs. O. V. Calhoun, Donald Purvis, W. H. Griffith and C. F. Gutch, have purchased the former Olney Clinic Building in Lincoln and are now practicing in their new quarters. Three other Lincoln physicians, Drs. G. E. Stafford, Robert Hillyer and Jerome Ritter, have also moved their offices to the building, now known as the Medical Arts Building.

TUBERCULOSIS ABSTRACTS

(Continued from page 63)

in the present instance was impossible. It was necessary to compare a group discharged medically with a group discharged against advice. The patients admitted to the center are selected in one respect. They are the more cooperative patients as the non-cooperative patients either walk out or are discharged before they are ready for transfer to this hospital. The patients discharged against advice from the center had accepted the purely medical and surgical treatment of the disease but refused the rehabilitation necesary to maintain the benefits of treatment.

The patients discharged with advice had completed the activity program at the hospial; had demonstrated adequate physical capacity for their future plans; and, had vocational guidance and selective placement in employment. The patients discharged against advice had left the hospital before their physical capacity was fully developed, and before vocational plans were completed.

The aim of rehabilitation of the tuberculous is to bridge the gap between the sanatorium and the community and to effect the gradual transfer of the patient from the sanatorium to the home. When we succeed in "controlling" a patient's disease we must understand that this is occurring in a "controlled" environment. After the patient leaves the hospital, economic and social factors appear which were not evident during active treatment. In the present study it was found that patients who completed rehabilitation, and who were discharged when judged ready for return, did much better than those who did not complete their rehabilitation. Rehabilitation is a definite part of the treatment of tuberculosis and is of benefit to the community in reducing costly readmissions to the hospital, loss of earning power, and expenditure of public funds.

—By David Leibovici, M.D., Medical Annuals of the District of Columbia, May, 1952.

A recent British writer designates tuberculosis as "a disease which has no frontiers." Quarantine cannot be used against it as is possible in foci of plague, cholera or yellow fever. Segregation in sanatoria is our best substitute. But even this has its drawbacks. First there are not enough beds, second discharge against advice is still current, releasing infectious cases again into circulation. (Kendall Emerson, M.D., Conn. State Med. J., May, 1952).

Public health programs should be so organized that the people who have the problems are given an opportunity to plan and contribute to the solution. Too often there is little participation by the individual, who passively receives the services. In a sense, health officials should aim to make every citizen a public health worker, at least in his own behalf. (Joseph W. Mountin, M.D., Pub. Health Reports, April, 1952).

DOCTOR, PLEASE TAKE EACH COPY OF YOUR JOURNAL HOME. THE WIVES COMPLAIN THAT THEY NEVER GET TO READ THE AUXILIARY COLUMN.

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EDITORIAL

GET THE "CHISELERS" OUT (?)

At the Clinical Session of the American Medical Association in December, 1951, the Board of Trustees appointed a special committee "to study thoroughly the entire program of federal medical care with respect to veterans and dependents of service personnel and recommend a course of action for the Association in this regard."

The committee, composed of Doctors E. L. Henderson, Perrin H. Long, George F. Lull, Walter B. Martin, H. B. Mulholland, Harvey B. Stone and Mr. C. Joseph Stetler (secretary) spent a year accumulating accurate data from dependable sources. They drew unbiased conclusions and made logical recommendations which were to be presented and acted upon at the Clinical Session in Denver in December, 1952.

The "Summary, Recommendations and Conclusion" segment of their report indicated that the general dissatisfaction among members of the medical profession regarding federal medical care in general, the apparent aims of those who favor extension of federal medical care and in particular, the medical care of veterans with non-service-connected disabilities by the Veterans facilities, is well founded.

The data collected by this committee seemed adequate as a foundation for definitive action by the House of Delegates, though additional studies remained to be made along certain lines. Almost before a study of the recommendations by this committee could be undertaken by a reference committee and before the matter could be placed squarely before the House for action, the Speaker introduced Dr. Norman R. Booher, Vice Chairman of the National Rehabilitation Commission of the American Legion. Doctor Booher addressed the House at length, after first informing the delegates that he had been sent by the National Commander, Mr. Lewis Gough, to represent him. The general tone of his address gave the impression that the Legion stood squarely with the A.M.A. in the matter of the treatment of patients with non-service-connected disabilities in Veterans Hospitals. The following is quoted from his address: "The position of the American Legion is that if these categories of non-service-connected cases are accepted as under the present law, we the American Legion stand willing and ready to join with the American Medical Association, American Hospital Association, American Dental Association and all others to prevent non-service cases which we might term "chiselers" from ever receiving treatment by the Veterans Administration."

On the face this statement seemed excellent. The "if" and "which we might term" went unnoticed. It was supplemented later by a plea by Admiral Boone that to follow the recommendations made by this committee "would not only hurt the Veterans Administration but would ruin it." He apparently referred to the association of Veterans Hospitals with medical schools and teaching. The result was that definitive action was not taken by the House of Delegates.

It remains to turn our attention now to an article in The American Legion Magazine for February, 1953, page 24, by Commander Gough, to get the real interpretation of Doctor Booher's words which were quoted above and which tended to mislead the House of Delegates. In this article Mr. Gough graphically reduces the cases under consideration to a mere eight per cent. The following is quoted from his article entitled "Who Is Being Treated in the VA Hospitals":

"All but 8 per cent who are hospitalized are service-connected, mental, TB, chronic, ordered in, public emergencies, or only technically non-service-connected.

"The critics who blast away indiscriminately at all the non-service-connected, have a job to do if they are to turn honest. They must subtract from the approximately 8 per cent remaining all those who told the truth on their P10s, and level their charges at a proved remainder."

Thus it appears that the House of Delegates was deceived by a play on words that left the real position of the Legion to be defined at a later and safer time.

THE BRICKER RESOLUTION

An editorial in the December, 1952, issue of The Nebraska State Medical Journal, entitled "Government by Treaty," pointed out the relative ease with which the provisions of our Constitution may be altered, and the rights of the states abridged by treaties. It also indicated the ease with which treaties may be ratified by our Senate. It finally gave an example of this very constitutional alteration or amendment by treaty and showed how it has functioned in abridgement of the rights of doctors and dentists in Nebraska. The prediction was made that efforts would be renewed, in the present Congress, to prevent constitutional amendment by treaty.

This prediction has come true. Senator John L. Bricker, for himself and sixty-two other Senators, introduced Joint Resolution No. 1 in the 83rd Congress. Senators Butler and Griswold of Nebraska were among those who joined Senator Bricker in presenting this resolution. The following is a copy of Joint Resolution No. 1:

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the following article is proposed as an amendment to the Constitution of the United States, which shall be valid to all intents and purposes as part of the Constitution when ratified by the legislatures of three-fourths of the several States:

"ARTICLE—

"Section 1. A provision of a treaty which denies or abridges any right enumerated in this Constitution shall not be of any force or effect.

"Section 2. No treaty shall authorize or permit any foreign power or any international organization to supervise, control, or adjudicate rights of citizens of the United States within the United States enumerated in this Constitution or any other matter essentially within the domestic jurisdiction of the United States.

"Section 3. A treaty shall become effective as internal law in the United States only through the enactment of appropriate legislation by the Congress.

"Section 4. All executive or other agreements between the President and any international organization, foreign power, or official thereof shall be made only in the manner and to the extent to be prescribed by law. Such agreements shall be subject to the limitations imposed on treaties, or the making of treaties, by this article.

"Section 5. The Congress shall have power to enforce this article by appropriate legislation.

"Section 6. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission."

The only way we, as citizens, can protect ourselves with certainly, from the ILO and other international organizations; treaties with foreign powers, such as the "Treaty of Friendship, Commerce and Navigation;" or, from the whims of some future President or presidential clique is by an amendment such as Senator Bricker has proposed and which is quoted above. Every doctor who agrees that we need such constitutional protection should communicate with his Senator and Representative and urge support for the prompt passage of this resolution.

Because the control of tuberculosis is a universal problem, found in all areas everywhere, the program must be shared by all agencies working together, official and voluntary. This means that the disease must be found, isolated, and treated and that efforts and methods for control must transcend the boundaries of a single state, local area, state or nation. The cost of fighting tuberculosis is very great and the problems it produces are many and complex . . . Efforts to control it and eventually to eradicate it require most intensive work on local, state, national and even international levels of action. (Mabel Baird, Conn. State Med. J., May, 1952).

Surgical Aspects of Hypersplenism*

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Following an exposition of the clinical and diagnostic features of hypersplenism, by other members of the panel, the author discusses the surgical aspects of the treatment. He emphasizes the studies to be performed which evaluate for him the operative risks in the given case, the probable complications he will meet and the steps to be taken preoperatively to minimize the dangers. He emphasizes study of the gall bladder, marrow studies, and preoperative transfusions. Operative techniques, postoperative management and complications are adequately discussed.

EDITOR

SURGICAL ASPECTS OF HYPERSPLENISM

The initial presentation of this symposium was devoted to a consideration of the clinical features of hypersplenism, including a systematic plan of approach to their diagnosis utilizing facilites of the laboratory. The remarks that follow will therefore apply only to those aspects of the problem which are of special concern to the surgeon, and will deal collectively with all syndromes constituting the hypersplenic group. The surgical approach to this problem will be outlined under the following subdivisions: Preliminary considerations and preoperative evaluation; preparation for the operation; the surgical procedure; postoperative management and complications.

PRELIMINARY CONSIDERATIONS AND PREOPERATIVE EVALUATION

Dependence on the Hematologist — Although it is not to be expected that the surgeon possess any special qualifications as a hematologist, it is nevertheless desirable that he have a general understanding of the mechanisms and manifestations of hypersplenism as outlined in the previous presentation of this symposium. Surgical consultation is rarely requested in this group of diseases until the hematologist has decided that splenectomy is desirable. In such a specialized field, the decision as to the advisability of operation is primarily a function of the hematologist rather than the surgeon. It therefore follows that a prime surgical prerequisite is reliable hematologic evaluation and follow-up. Dependence upon the hematologist is the basic prerequisite in the surgical management of this group of diseases.

Adequate Blood Banking Services — The availability of an adequate supply of blood is of paramount importance. In addition, it is desirable on occasion to have access to such preparations as freshly drawn blood, packed red cells, or platelet concentrates.

Special Examinations — In addition to the general appraisal of the patient's ability to withstand the contemplated surgical procedure, it is desirable to perform special examinations in certain instances. In hemolytic anemia, either congenital or acquired, the incidence of calculous disease of the biliary tract is very high, presumably being related to excessive production of pigment from accelerated hemolysis. It is desirable to perform x-ray visualization of the gallbladder on every patient in whom splenectomy for hemolytic anemia is contemplated. Splenectomy should take precedence over cholecystectomy when gallstones co-exist, but it may be possible to perform both procedures at the same time. Although preliminary examination of the bone marrow is the rule, occasionally the case at hand may appear so typical that recommendation for surgery is made in the absence of marrow studies. The surgeon is within his rights in insisting upon the performance of marrow studies in every patient who is to undergo splenectomy for hypersplenism. An occasional case of unsuspected leukemia or of aplastic anemia may thereby be detected. It is only when the marrow is hyperplastic that the surgeon may feel reasonable assurance that splenectomy will be effective.

Estimation of Size of Spleen — It is not to be expected that the spleen shall be large in cases of thrombocytopenic purpura. Indeed, manifest enlargement of the spleen in this condition is unusual. On the other hand, splenomegaly is the usual accompaniment of hemolytic anemia, whether congenital or acquired, and of the other hypersplenic states. However, one need not be deterred if the spleen is not palpable. It is not uncommon to discover at operation that the spleen has enlarged more in an upward than a downward direction, and that a spleen of considerable size may be situated well above the costal margin curving over the fundus of the stomach. The author has removed a spleen weighing 1,500 grams which was never felt, despite repeated palpation by several examiners. X-ray may be helpful in demonstrating splenomegaly which is not apparent clinically. In any case, the inability to palpate the spleen is in no instance a contraindication to operation if classical evidences of hypersplenism exist.

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*Read before Annual Convention Nebraska State Medical Association, May 15, 1952.

PREPARATION FOR THE OPERATION

Blood Transfusion — There has been some controversy regarding the advisability of blood transfusion prior to operation in the hemolytic states. During episodes of severe hemolysis isoagglutinins may develop against the patient's own cells, making it necessary to resort to special immunologic techniques to obtain compatible blood. In some instances it has been found useful to elute the antibodies from the patient's cells and to use this eluate as a testing medium for the special selection of blood donors who otherwise match with respect to blood group and Rh type. The author's group has never hesitated to employ whole blood transfusions or packed red cells in whatever quantity is necessary to bring the patient to a safe level for operation. It is well to remember that transfused blood is destroyed rapidly, wherefore it is desirable to give the necessary transfusions at shorter intervals than would ordinarily be customary, and to perform splenectomy as soon thereafter as possible. It is highly desirable, moreover, to attempt to reach the optimum level of blood replacement by the time the operation is concluded. If the administration of blood is continued in the days following surgery, it becomes difficult to determine the magnitude of hematolgic response which the patient is making on his own. An attempt should be made, therefore, to establish a situation wherein no additional blood is needed for several days following operaion, thereby allowing more accurate evaluation of the patient's own response during this period.

Evaluation and Correction of Bleeding Tendency — In Thrombocytopenic states the surgeon must be informed concerning the state of the patient's blood coagulating mechanism. It is not widely appreciated among surgeons that there is no exact parallel beween the platelet level and the tendency of the patient to bleed. Routine evaluation of the coagulating mechanism should include platelet counts, bleeding time, clotting time (preferably by the Lee-White method), prothrombin time, prothrombin consumption determination, Rumpel-Leede test, marrow studies, and titration of heparin-like substances. The blood of thrombocytopenic patients is usually found to contain increases of heparin-like substances. The tendency of the patient to bleed is proportional in some degree to the concentration of such substances in the blood. The effect of these substances may be neutralized by the administration of toluidine blue or protamine, as described by Allen(1) and associates. This type of therapy is not necessary in the ordinary case, since the abnormality ordinarily corrects itself following splenectomy. The most practical method for improvement of blood coagulation in thrombocytopenia is the administration of freshly drawn blood immediately prior to and during operation. However, when marrow studies have shown adequate numbers of megakaryocytes or platelet precursors, the surgeon may feel reasonably assured that the bleeding tendency will correct itself within a short time after ligation of the splenic vessels.

Administration of ACTH or Cortisone — Information available to date indicates that the administration of ACTH or Cortisone will reduce the bleeding tendency in thrombocytopenia. Stefanini(5) and associates report good results in eleven patients so treated, although no permanent remission was obtained. Under the direction of the hematologist these hormones may be employed with apparent benefit as agents for the preparation of patients for operation.

THE SURGICAL PROCEDURE

The Incision — The abdominal approach is recommended. The author prefers the subcostal or transverse incision, although the adequacy of the paramedian vertical incision cannot be denied. In recent years transthoracic or thoraco-abdominal incisions have been advocated by some, based on the supposition that extensive adhesions between spleen and diaphragm could be dealt with more adequately by one of these routes. However, the extensive adhesions of spleen to diaphragm which are frequently encountered in congestive splenomegaly are rarely seen in the hypersplenic group. The transthoracic approach possesses one distinct disadvantage, since it does not permit as thorough a search for accessory spleens as is possible with abdominal incisions. The abdominal approach is preferable for this reason alone, if for no other.

Search for Accessory Spleens — The surgical significance of accessory spleens is discussed in detail by Curtis and Movitz(3). These authors outline the incidence, location, and distribution of accessory spleens and emphasize the importance of their removal. Failure to do so may result in recurrence of the disease.

Injury to the Tail of the Pancreas — The hazard of occult injury to the tail of the pancreas has been emphasized by Baronfsky, Walton, and Noble(2). The tail of the pancreas often lies in very close approximation to the hilum of the spleen. Injury to the tail of the pancreas may result in profuse drainage of milky fluid containing pancreatic enzymes, which may in turn be complicated by fistula or abscess formation. An attempt at positive identification of the tail of the pancreas should be made in every splenectomy.

Control of Bleeding — Troublesome bleeding may be encountered in the thrombocytopenic states. In the classical case, the response upon ligation of the splenic vessels is prompt and dramatic. It is therefore not infrequent to experience difficulty with hemostasis during the initial stages of the operation, and to enjoy a dry field at the time of closure. However, in the absence of an adequate megakaryocyte response, the bleeding tendency may continue through all stages of the operation. The following steps are suggested for the control of bleeding:

1. Attempt to predict prior to operation those patients in whom severe bleeding may be anticipated, based on the following observations: a. Cases which appear atypical from a hematologic standpoint; b. instances where marrow studies have left some doubt as to the adequacy of megakaryocytes; c. patients with pronounced elevations of heparin-like substances in the blood.

2. Administer freshly drawn blood immediately prior to and during operation. When severe bleeding is anticipated, platelet concentrates may be desirable.

3. Avoid introduction of endotracheal or naso-gastric tubes prior to or during operation.

4. Apply mosquito clamps to the numerous intradermal bleeding points, leaving the clamps in place until the conclusion of the operation. By that time bleeding may be retarded to the extent that very few of these vessels will require ligation.

5. Prepare a sterile atomizer spray containing 1000 units of bovine thrombin per ounce of saline. Employ this solution as a spray to the wound margine and wound drapes.

6. Ligate everything which is divided within the abdomen, including the apparently avascular mesenteric structures.

7. For persistent oozing from the dermal edges at the time of closure, apply closely spaced skin clips.

8. Toluidine blue or protamine may be given for bleeding which persists despite other efforts at hemotasis. The author's group prefers to defer the administration of these drugs until the patient has reacted from anesthesia.

9. The administration of ACTH or Cortisone should be continued as long as there is evidence of bleeding.

Autotransfusion by Injection of Adrenalin Beneath Splenic Capsule — The author regards this procedure as unnecessary. If the artery is tied a few moments prior to the vein, the spleen will become wrinkled and shrunken in the course of ordinary manipulations.

Exploration of the Gallbladder — Because of the high incidence of cholelithiasis in association with hemolytic disease, particular attention should be paid to palpation of the gallbladder in splenectomies in this group. Splenectomy should always precede cholecystectomy when the two diseases co-exist.

Extent of Blood Replacement — It is desirable to conclude the operation at par with respect to blood replacement. If a state can be achieved wherein no transfusion is necessary for a few days subsequent to operation, the hematologic response of the patient to splenectomy can be evaluated with much greater accuracy.

POSTOPERATIVE MANAGEMENT AND COMPLICATIONS

With very few exceptions, the complications incident to splenectomy are essentially those of any abdominal operation of comparable magnitude. Previous reference has been made to the complications which may follow surgical injury to the tail of the pancreas.

Thrombosis of the splenic vein has been mentioned as a specific complication following splenectomy. This subject has been reviewed by Davis and Sharpe(4), who noted that this complication was largely confined to instances of portal hypertension or congestive splenomegaly. It is, apparently, a very uncommon complication in the primary hypersplenic states. There is no evidence to indicate, for example, that it is dangerous for platelet levels to attain such heights as one million following splenectomy for thrombocytopenic purpura.

Administration of iron is to be avoided in hemolytic states, since the tissues are likely to contain excesses of iron as a consequence of exaggerated hemolysis.

Good hematologic response to splenectomy is often apparent within a few hours after operation. Prompt rise of the affected cell population offers the greatest promise of an entirely favorable outcome. However, deleyed responses of a satisfactory degree are not uncommon, even after an interval of weeks.

Recurrence of the disease following a good initial response should lead one to consider the possibility that an accessory spleen may have been overlooked at the initial operation.

SUMMARY

The general subject of hypersplenism has been considered primarily from the surgical point of view. Suggestions are given for preoperative evaluation and preparation of the patient for operation, and for special procedures to be carried out during the operation.

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Internal Hernia Secondary to Acute Appendicitis*

E. K. CONNORS, M.D. and R. L. LAWTON, M.D.
From the Surgical Services of the Creighton University
School of Medicine and the Veterans Hospital
Omaha, Nebraska

The authors present a case report depicting an unusual intra-abdominal condition—an internal hernia in which the herniation was associated with subsiding appendicitis. The tip of the thickened vermiform appendix had become adhered to the root of the mesentery and the cecum had herniated through the loop thus produced. They emphasize the lack of data on which an accurate diagnosis may be made in such a condition.

EDITOR

The incidence of internal hernia is extremely rare, accounting for less than 1 percent of the cases of intestinal obstruction. The most common variety is the type associated with one of the internal abdominal fossae. Less common are those associated with defects in the mesentery either congenital or surgically produced. Least common are those resulting from inflammatory lesions. Although the protean behavior of appendicitis is well known, we believe the following case of an internal hernia secondary to appendicitis to be most unusual. We have been unable to find a similar case reported in the literature.

CASE REPORT

The patient was a 29 year old colored male admitted to the hospital on 10-27-51, complaining of the sudden onset of vomiting two weeks prior to admission associated with dull periumbilical pain. The symptoms were of brief duration, and he remained well for three days when vomiting again developed, now occurring about 30 minutes after each meal. The pain also recurred, and these symptoms persisted for three days, when he again became asymptomatic. He remained well for approximately one week, when severe, cramp-like, periumbilical pain of increasing severity accompanied by vomiting finally forced him to seek hospitalization. Throughout his illness his bowel movements had been normal.

Physical examination revealed a well-developed, well-nourished, colored male of asthenic habitus who appeared acutely ill. The abdomen was scaphoid, and there was tenderness to deep palpation in the epigastrium and periumbilical areas. There was no rigidity, no mass, and the bowel sounds were normal.

The laboratory studies included a complete blood count, urinalysis, serum amylase, serology, sickle cell test, liver function studies and stool and sputum studies. All were entirely within normal limits. Roentgenograms of the chest and abdomen were normal.

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*Sponsored by the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the authors are a result of their own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

Within 24 hours after admission to the hospital the pain subsided except for an occasional dull cramp of short duration. Three days later a mild, dull epigastric pain developed, coming on several hours after meals. Nine days after admission, on 11-5-51, severe cramp-like abdominal pain developed which was only partially relieved by morphine. The patient was afebrile and a leukocyte count was normal. A flat plate of the abdomen showed a radiolucent area in the right lower quadrant compatible with dilatation of the cecum, and physical examination revealed exquisite tenderness in this region. No rigidity or rebound tenderness could be demonstrated. The diagnosis of intussusception was made, and on 11-7-51 an exploratory laparotomy was performed through a right paramedian incision.

At operation the cecum was found to be markedly distended and extremely mobile. It had passed beneath and behind a thick band which extended medially and was firmly attached to the root of the mesentery by inflammatory adhesions. On closer examination this band was identified as the appendix. The cecum and a portion of the terminal ileum had herniated through this artificially produced aperture but were easily reduced. The thickened appendix, approximately 1½ cms. in diameter was dissected free from its attachment to the mesentery, and an appendectomy was performed. The postoperative convalescence was uneventful. The pathologist's report was acute, subsiding appendicitis.

The sequence of events in this case was thought to be as follows: The patient had an acute episode of appendicitis several weeks prior to admission to the hospital. This was subsiding, and the admission to the hospital was prompted by symptoms of intermittent obstruction resulting from the herniation of the cecum through the loop previously described. The exacerbation of symptoms which prompted laparotomy was probably due to an increase in the obstruction. The exquisite tenderness in the right lower quadrant was undoubtedly due to the distended cecum which was demonstrated at laparotomy.

DISCUSSION

The symptoms from internal hernia vary with the degree of herniation. When no incarceration or strangulation is present, the symptoms may remain vague and intermittent. When the herniated contents exceed the limits of the confining defect or when the circulation to the herniated gut becomes impaired, the characteristic symptoms of intestinal obstruction with strangulation become evident. The sudden onset of symptoms of intestinal obstruction with signs of strangulation seldom suggest internal hernia as the etiologic factor unless a previous history of intermittent intestinal obstruction can be obtained. In the case presented the intermittency of symptoms should have suggested the possibility of internal hernia. There are almost no specific diagnostic tests available to differentiate internal hernia from other causes of intestinal obstruction. The presence on x-ray of dilated loops of small bowel confined to one portion of the abdomen is suggestive but certainly not consistently reliable. It should be remembered that gangrene occurs in sixty-two per cent of cases of intestinal obstruction due to internal hernia. Only earlier diagnosis with more prompt surgical intervention would lower this high incidence of gangrene and the associated high mortality rate.

SUMMARY

A case of subsiding acute appendicitis producing an internal hernia involving the cecum and terminal ileum is reported.

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The death rate tells only part of the story, that there is still in every community a great reservoir of known and unknown cases of tuberculosis, and that it causes more deaths than any other disease in the age group 15 to 34. Everything points to the need for stepping up the program of case finding throughout the nation and to the need for greatly increased facilities for care of tuberculous persons, but there are now definite signs that the battle against the disease is reaching its final stages. (Arthur C. Christie, M.D., J.A.M.A., January 10, 1953).

Give a hand to crippled children.
Give to Easter Seals.

Pathogenesis and Treatment of Pernicious Anemia*

PEYTON T. PRATT, M.D. and MARLIN O. JOHNSON, M.D.**
Omaha, Nebraska

Doctors Pratt and Johnson briefly trace the growth of our present knowledge and concept of pernicious anemia, showing how investigators proved that vitamin B_{12} is the "intrinsic factor" necessary to the production and maturation of erythrocytes and maintenance of integrity of the central nervous system. They then relate in some detail the results of the use of B_{12} in eleven persons having pernicious anemia, for a period of three years. The dose required to produce and maintain a normal blood count and to obtain maximum improvement in neurological abnormalities of the disease, is discussed.

EDITOR

The clinical features of pernicious anemia were first described in 1855 by Addison(1) and in 1872 by Biermer(2). Little more was done until 1926 when Minot and Murphy(3) reported forty-five (45) patients with pernicious anemia, whom they had treated by a diet consisting primarily of liver. This produced definite improvement in these patients. Since that time there has been much interest in pernicious anemia and much work done on the mechanism involved in this disease as well as improvement in methods of treatment. This report will mention briefly a portion of our present knowledge in the understanding of pernicious anemia as well as the clinical experience with this disease and the use of vitamin B_{12} at the University Hospital.

EVOLUTION OF THE PATHOGENESIS OF PERNICIOUS ANEMIA

Castle(4), in 1929, associated achylic gastrica with the anemia, and demonstrated that there was an intrinsic factor in the stomach necessary for the formation of anti-pernicious anemia factor from meat and other proteins. An intramuscular liver extract was soon developed which could be given satisfactorily with only an occasional reaction and which would produce permanent improvement as long as treatment was maintained.

There were criteria set up for standardization of this liver extract, and a unit was defined as the smallest amount of liver extract which, when given each day, would produce the maximum expected reticulocyte response in a patient with pernicious anemia in relapse.

There has been a constant effort to further purify the liver extract and to obtain only the active principle involved in the treatment of pernicious anemia.

In 1947, Shorb(5) found that the Lactobacillus lactis Dorner needed two factors for growth; one was obtained from tomato juice, and the other was a heat stable factor present in liver extract. The latter growth factor was comparable to the active anti-pernicious anemia principle in liver. Thus, a simple easy bioassay of the anti-pernicious anemia factor became available.

Using this method of assay, Rickes, and co-workers(6), tested various fractions of liver extract and finally obtained one in the crystalline form which was effective as a growth factor for the Lactobacillus lactis Dorner. This was the most potent enzyme ever obtain and was labeled vitamin B_{12}.

Vitamin B_{12} is a red, crystalline substance containing cobalt, phosphorus, and nitrogen, without sulphur, but whose structure is not definitely known.

West(8) used this substance in treating three patients who had pernicious anemia. He obtained a good reticulocyte response in the two patients receiving 150 micrograms and 6 micrograms respectively. The third patient received 3 micrograms and had only a partial response. Apparently this was the active anti-pernicious anemia principle.

Heinle et al(9) have recently shown that when vitamin B_{12} labeled with radioactive cobalt, is fed to patients with pernicious anemia under treatment and to normal people, the degree of absorption of the vitamin B_{12} may be measured. Less than twenty-five per cent of the B_{12} is absorbed in the pernicious anemia patient and over seventy-five per cent is absorbed in the normal subject. These facts show that B_{12} is available in the gastrointestinal tract for the prevention of the anemia, but that it is not absorbed. It has also been demonstrated, but not definitely confirmed, that when B_{12} is injected into bone marrow of a patient with pernicious anemia it will change the erythropoesis from "megaloblastic" to normoblastic in that local area(10). Although this has not been confirmed it suggests that B_{12} is the active anti-pernicious anemia principle, and it does not need alteration in the body in order to become effective. The role of the intrinsic factor, therefore, appears to be one of facilitating absorption of B_{12} and not one of chang-

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**Now in Bismark, North Dakota.

ing it into an active substance. Thus, according to our present knowledge of pernicious anemia, the disease is due to an absence of the intrinsic factor. It is the cause of this that is still uncertain.

In order to understand how vitamin B_{12} prevents the anemia, it is necessary to review the mechanism involved in the development of the red blood cell. There are two separate enzyme systems. One involves the maturation of the nucleus and, finally, its extrusion from the cell. The other involves the formation of hemoglobin in the cytoplasm. The latter is dependent on iron metabolism. The former consists of the formation of desoxyribose nucleic acid from amino acids through several enzyme systems. (See Figure I). One transformation is changing amines from amino acid and carbon into thymine; this is potentiated by the folic acid, folinic acid mechanism. The second change is from thymine to thymidine which is potentiated by vitamin B_{12}. Thymine is then changed into desoxyribose nucleic acid by some undetermined catalyst. With proper formation of this nuclear protein, the cell growth rate is normal and the nucleus is extruded when the cell reaches a certain size and hemoglobin content.

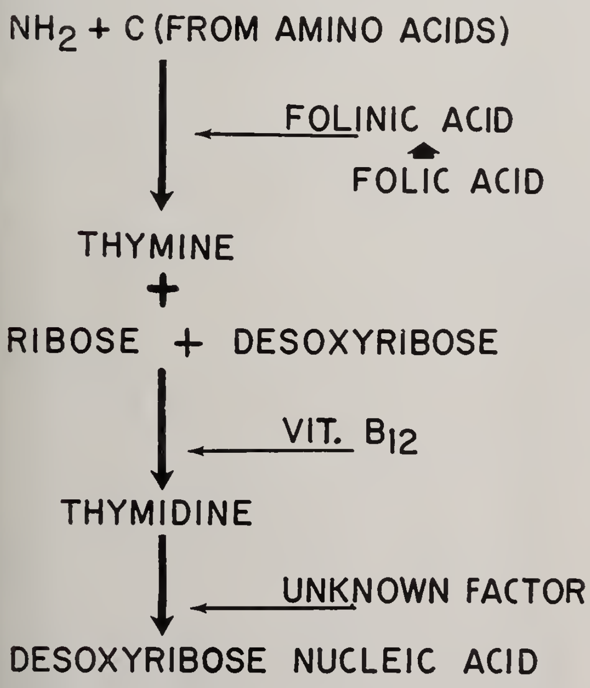

Figure I. Diagramatic representation of nucleo-protein formation.

If there is a deficiency in B_{12}, the nuclear growth is slowed or delayed; and the cytoplasm growth, which is hemoglobin formation, continues with the end result of larger but fewer red cells. B_{12} has a similar effect on granulopoiesis and platelet formation so that with B_{12} deficiency a leucopenia and thrombocytopenia also occur. Whether there is an analagous effect on the central nervous system is not certain.

There is, recently, some evidence presented by Hamilton, Sheets and Janney(11), that the hemolytic phase, as well as the maturation defect, of pernicious anemia is corrected by vitamin B_{12}. When red blood cells of an untreated pernicious anemia patient were transfused into a normal person and their survival was measured by the modified Ashby technique, the life span of these cells was found to be reduced. This situation was not altered until 45 micrograms of B_{12} were present in the patient for 10 days. This was given in one or in divided doses, and, until it was given, the transfused red cells had this decreased life span. The inference drawn by these investigators is that the patient's own red cells behave similarly.

Hence, in pernicious anemia there is an inability to absorb vitamin B_{12} and this produces the characteristic anemia, leucopenia, thrombocytopenia, as well as the increased hemolysis and, apparently, the central nervous system changes.

CLINICAL EXPERIENCE WITH B_{12}

We have seen eleven patients with pernicious anemia at University Hospital and Hematology Clinic treated with vitamin B_{12} since January 1, 1950.

These can be divided into two groups: seven patients in relapse treated in the hospital and one of these and four other patients that have been followed in the out-patient clinic for nearly two years.

The clinical criteria used for diagnosis of pernicious anemia were the symptoms of anemia, glossitis, diarrhea, weight loss and postero-lateral column disease. The laboratory criteria used were macrocytic anemia, leucopenia, thrombocytopenia, hyperbilirubinemia, increased stool and urine urobilinogen, absence of free acid in the stomach after histamine, and the diagnostic bone marrow findings.

One of these cases of pernicious anemia in relapse complicated by chronic bleeding was treated with 2 micrograms of B_{12} daily for fourteen days and had the maximum expected reticulocyte response. However, another complicated case with mild anemia and predominant neurological disease was treated with a large dose of vitamin B_{12} and made a good reticulocyte response as well as improvement in his nervous system.

There were five cases of uncomplicated pernicious anemia in relapse who were treated with B_{12}. Two of this treated group received 2 micrograms per day and had a good response (See Figure II). Three were treated with 1 microgram per day and two had a good response. One did not have the expected reticulocyte response, but had received blood during therapy and this masked the reticulocyte response. The response expected was a return of the hemoglobin and red cell count to normal levels in eight weeks, and a peak reticulocyte level between the fourth and eleventh days of therapy. The more marked the anemia the higher the reticulocyte peak was expected to be.

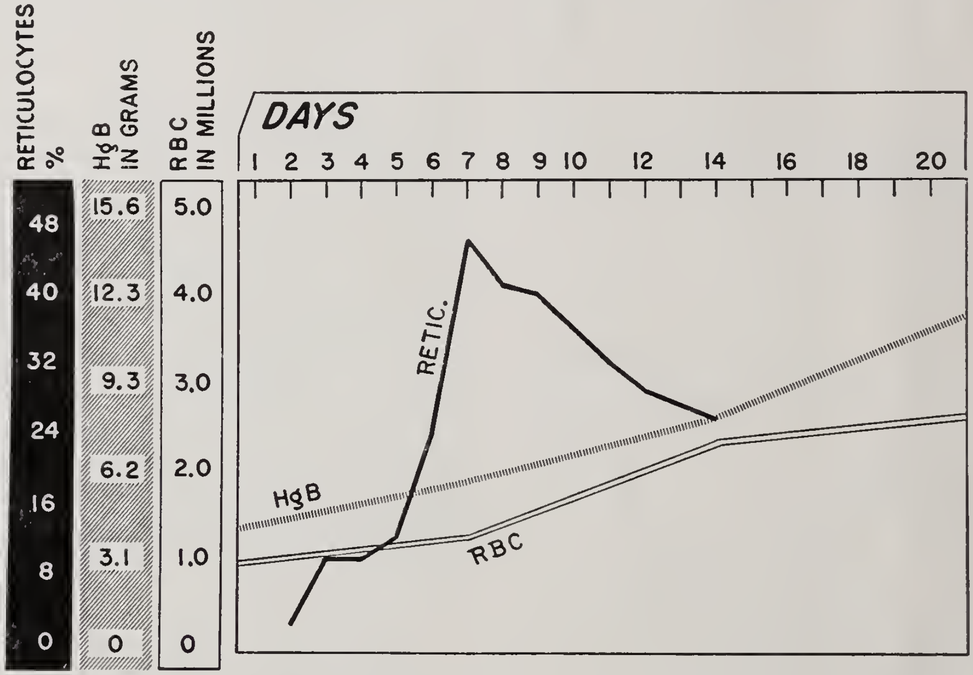

Figure II. This demonstrates the reticulocyte response in a patient with pernicious anemia treated with 2 micrograms of Vitamin B_{12} each day.

There have been five (5) patients followed in the Hematology Clinic for six months to two years. Four have received 15 micrograms of crystalline vitamin B_{12} every two weeks. They have been evaluated clinically as to evidence of the change in their paresthesias, loss of appetite, weight loss, evidence of glossitis and with a neurological examination. Repeated blood studies have been made and periodic gastrointestinal x-rays taken. All of these patients have maintained their hemoglobin, red cell, white cell and platelet counts and have felt well. None of the patients has had any regression of the previously stable neurological disease.

The fifth patient with a diagnosis of pernicious anemia complicated by neurological disease, has been treated with 30 micrograms of B_{12} twice a week and has had continued improvement in his neurological disease for the past eight months.

DISCUSSION

In evaluation of our cases and those from the literature it appears that one to two micrograms of vitamin B_{12} daily in treatment of pernicious anemia relapse is adequate to produce improvement in the anemia. This need not be given daily and probably it is better to give it in larger doses two to three times a week, as nearly all these patients will be found to have some neurological disease. As maintenance dose the equivalent of one or two micrograms of vitamin B_{12} daily given as a total dose every two to three weeks is adequate. This, of course, needs individualization and depends largely on the patient.

In neurological pernicious anemia, the dose is increased in amount and frequency in our patients until no futher improvement is obtained or until evidence of neurological disease is gone. This type of therapy usually is continued for over one year before assuming there will be no further improvement. When the neurological disease is stabilized, there is no need for a large amount of vitamin B_{12}. Then a patient is put on a maintenance dose. This is determined by maintaining normal hemoglobin, red cell, white cell and platelet counts with no evidence of relapse as judged by worsening or development of neurological symptoms and signs.

SUMMARY

Some of the literature in regard to pathogenesis of pernicious anemia has been reviewed, and reveals the defect to be an inability to absorb vitamin B_{12} from the gastrointestinal tract. A deficiency of vitamin B_{12} results in a delayed maturation of red cell growth, white cell growth, and platelet formation. It may have a similar role in nerve cell metabolism. Also, there is an apparent effect of a reduced life span of the red cell with inadequate vitamin B_{12}.

A review of the clinical experience with pernicious anemia treated at the University Hospital and Clinic for the last two years is presented, showing that vitamin B_{12} maintained a normal blood count in eleven patients and induced improvement in those with neurologic abnormalities attributed to this disease.

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Pyloric Hypertrophy in the Adult*

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Doctor Kleitsch maintains that pyloric hypertrophy analogous to that seen in infants, possibly the persistence of a subclinical condition present since infancy, occurs in adults. Symptoms are vague and sometimes confused with those of peptic ulcer. Diagnosis is made by x-ray examination. Treatment is surgical, the procedure being dictated by the purity of the lesion or its association wtih duodenal or gastric ulcer. He illustrates the pathology and x-ray findings by use of photographs.

EDITOR

Hypertrophy of the pyloric muscle is usually considered to be a disease of infancy. Pyloric hypertrophy, however, does also occur among adults and may be the source of much confusion in diagnosis and selection of treatment.

The etiology of the condition is not clearly established, although it seems probable that it is a continuation of the congenital hypertrophy that occurs in infants. It is possible that subclinical pyloric hypertrophy, which does not require surgical correction in childhood, may persist into adult life.

The pathology of the condition consists of a true hypertrophy of the pyloric sphincter muscle which is demonstrable grossly as well as on histopathological study. The gross specimen of a resected hypertrophied pylorus looks very much like a cervix (Fig. 1). The microscopic appearance reveals a thickening of the pyloric muscle fibres with considerable edema separating the various bundles (Fig. 2).

The symptomatology is vague and frequently confused with that of peptic ulcer. Peptic ulcers, both of the duodenum and of the stomach, are not infrequently associated with pyloric hypertrophy in the adult. The diagnosis, when made before operation, is indicated by an upper G.I. series. In our experience a "pyloric string sign" is a constant finding in all cases. The pyloric canal is seen as a narrowed, elongated channel and we believe that this finding, if persistent, is pathognomonic. This finding is best illustrated by the following roentgenograms (Fig. 3, a, b, c, d, e).

The symptoms of pyloric hypertrophy are produced by the outlet obstruction of the stomach. This is an anatomical abnormality and therefore requires an operation for correction. Elimination of the obstruction at the outlet of the stomach eliminates the

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*Read before the 84th Annual Convention Nebraska State Medical Association.

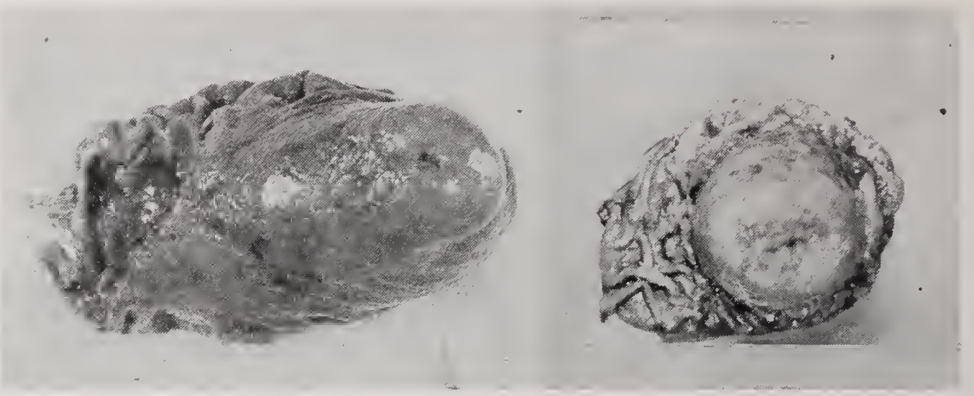

Fig. 1. Two surgical specimens of pyloric hypertrophy in the adult for which a subtotal gastrectomy because of coincidental duodenal ulcer was done. The specimen has been inverted to show the hypertrophied ring of pyloric muscle and the stenotic pyloric canal.

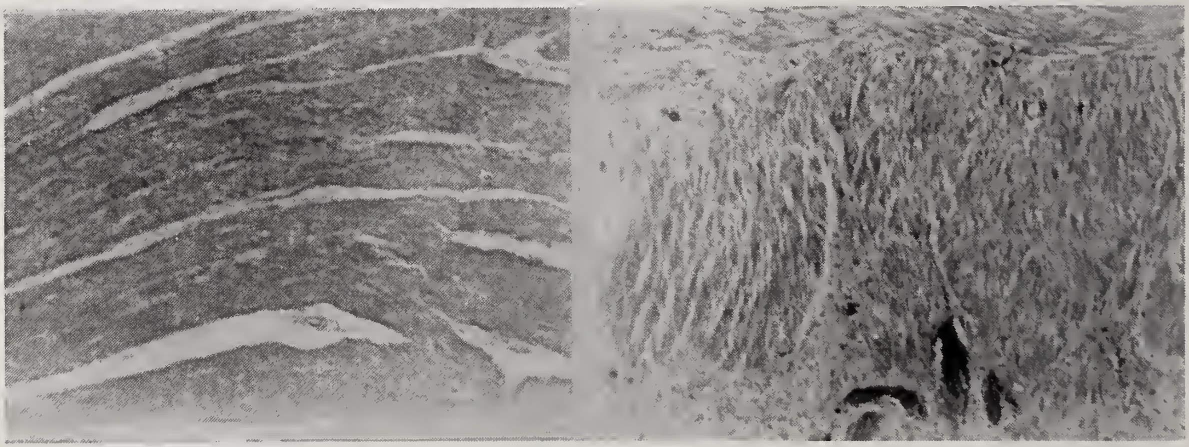

Fig. 2 Two microphotographs of the hypertrophied pyloric muscle showing the edema and fragmentation.

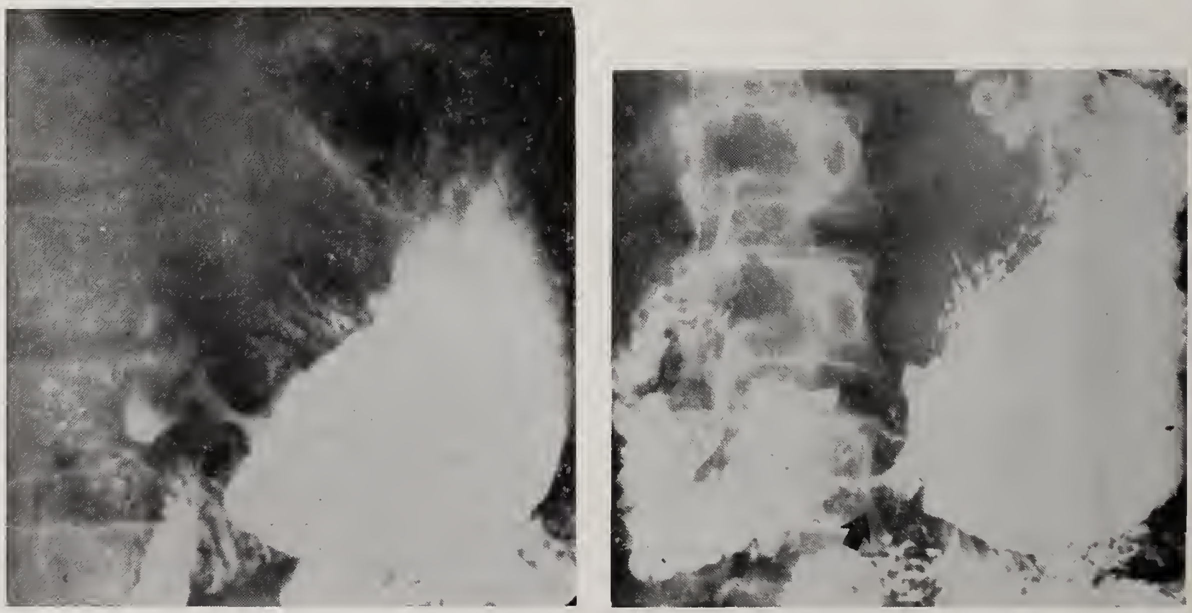

Fig. 3a

Fig. 3b

Fig. 3, a, b, c, d and e. A series of roentgenograms of pyloric hypertrophy occurring in adults. The arrow indicates the diagnostic "pyloric string sign" in each.

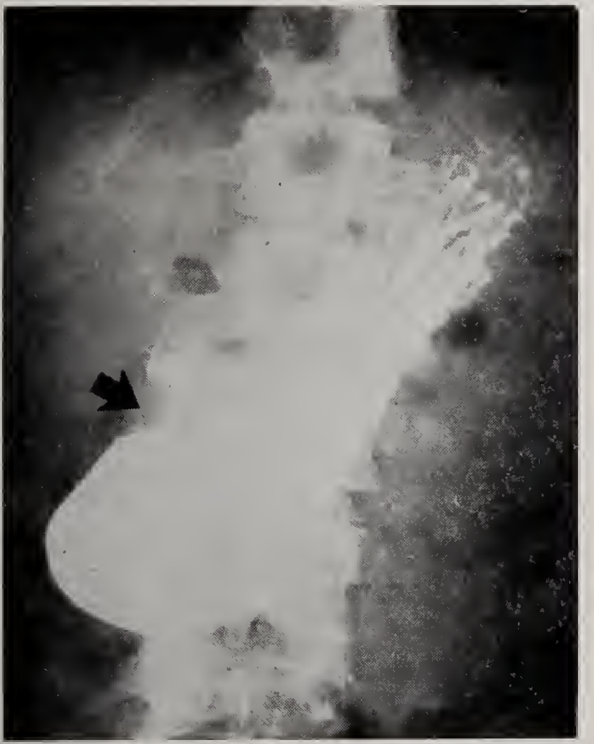

Fig. 3c

symptoms produced by pyloric hypertrophy in the adult.

At laparotomy the hypertrophied pyloric muscle is usually easily identified. The surgical treatment of it depends upon the degree of hypertrophy and on the presence of associated peptic ulcers. If the hypertrophy is moderate in degree and no ulceration is demonstrable, a longitudinal incision in the gut transecting the pyloric muscle followed by transverse closure is simple and effective. This is the Heineke - Mikulicz pyloroplasty and is the procedure of choice when possible.

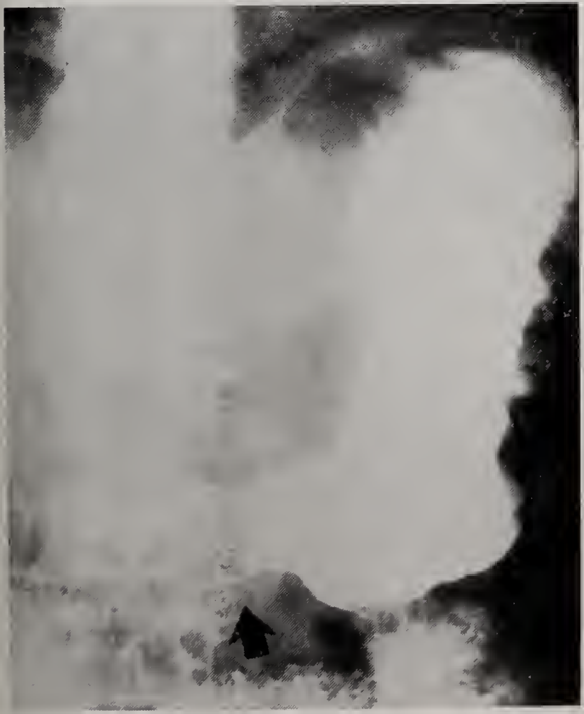

Fig. 3d

If the muscle is hypertrophied to an extent to make transverse closure difficult, a Billroth I type of operation is indicated as the most simple and effective procedure. When a peptic ulcer of the duodenum is found to coexist with pyloric hypertrophy, it is wise to treat the ulcer diathesis by doing a subtotal gastrectomy, as well as resecting the pylorus — a modification of the Billroth II operation.

In those cases where a gastric ulcer accompanies a pyloric hypertrophy, a cancer operation must be done because it is impossible to differentiate grossly between benign and malignant gastric ulceration. This, then, requires a radical subtotal resection with "en bloc" removal of the regional lymphatics.

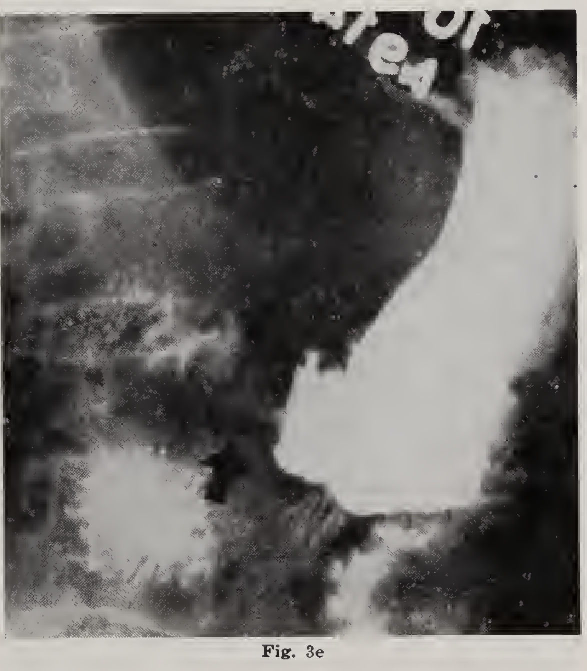

Fig. 3e

CONCLUSION

Pyloric hypertrophy may exist as a source of symptoms in the adult as well as in the infant. Symptoms are not particularly suggestive. Study of the upper G.I. roentgenograms will aid in making the diagnosis preoperatively if the pathognomonic "pyloric string sign" can be demonstrated. The treatment is surgical and must be adjusted to each case so as to relieve the outlet obstruction of the stomach and to treat associated gastric or duodenal ulceration.

Adenocarcinoma of Lung*

This excerpt from the transcribed transactions of the Lincoln Hospitals' Tumor Clinic was prepared for publication by Doctor J. Marshall Neely.

EDITOR

DR. CLARENCE ELLIOTT: This 68 year old white female was first seen January 8th, 1951 complaining of two slightly tender nodes in the left supraclavicular area which she had first noticed about 2 weeks previously. At the time she was first seen she expressed some concern regarding the possibility of these being malignant. She had no symptoms aside from the presence of these nodes. The past history revealed that she had suffered from a moderately severe hypertension for fifteen years and that she has hypertrophic arthritis of the knees and hands.

On physical examination the eyes, ears, nose and throat were entirely normal except for a grade II arteriosclerosis which was noted opthalmologically. There was no evidence of adenopathy other than described above. The thyroid gland was small and revealed no evidence of nodules. Examination of the chest revealed a mild emphysema but otherwise nothing abnormal was found. Breasts were pendulous but no masses were palpable. There was evidence of moderate cardiac enlargment. There was also evidence of moderate peripheral arteriosclerosis. The blood pressure was 212/100. The heart tones were clear and regular. Abdominal examination revealed no evidence of masses or other significant abnormality. Pelvic and rectal examinations were entirely within normal limits. Extremities were normal except for evidence of arthritis in the knees and fingers. Urinalysis and complete blood studies were entirely within normal limits. The sedimentation rate was 14 mm. an hour.

X-ray examination of the upper gastrointestinal tract and sinuses and intravenous urography were all entirely within normal limits. X-ray examination of the chest however, revealed a poorly defined fibrotic-like infiltration in the plane of the third left anterior interspace which was not characteristic of primary or secondary neoplasm. However it was felt that neoplasm could not be definitely excluded. The left supraclavicular nodes were removed by Dr. Clayton Andrews for microscopic study.

DR. F. TANNER: The lymph nodes removed showed metastatic adenocarcinoma, source undetermined.

DR. J. T. McGREER: (Showing x-ray films) These films show an infiltration in the left third anterior interspace and there appear to be some fine fibrotic strands extending into the hilum from this area. Another chest film made about two weeks after admittance shows some questionable enlargement of this lesion, compared with the original examination.

DR. J. MARSHALL NEELY: One of the notorious silent sources of primary neoplasm is the thyroid gland and while most of them are well differentiated and show sufficiently characteristic histologic findings to make one think of thyroid, there are those where an undifferentiated tumor which is not necessarily palpable occurs in the thyroid.

DR. ORVIS A. NEELY: A tracer dose of radioactive iodine might be useful.

DR. J. MARSHALL NEELY: That is true except that in so undifferentiated a neoplasm it is doubtful that any radioactive iodine would be picked up.

Subsequent Course: This patient was discharged from the hospital about one week later and consulted a thoracic surgeon in Denver, Colorado, who felt that in all probability the small fibrotic-like lesion in the left upper lobe represented a primary carcinoma of the lung. For this reason the left upper lobe was removed and the lesion was found to be a primary adenocarcinoma. She survived her surgery well but following this her course was essentially retrogressive and death occurred on 10-15-52 with evidence of wide spread metastases.

With all the additions and improvements in clinical and laboratory procedures, the diagnosis of tuberculosis is more difficult than ever. This is because we have progressed from a stage of making the diagnosis by positive sputum and gross physical signs or marked x-ray changes to a point where the infection is detected when no gross destruction of tissue has taken place. This means negative sputum, no abnormal physical signs, and early changes on the x-ray films. (John H. Skavlem, M.D., The W. Va. Med. J., Dec., 1952).

The ultimate aim of any antituberculosis program is the rehabilitation of the patient. Throughout the long days of therapy the patient must be imbued with a belief in his ability to resume a normal life. (J. Winthrop Peabody, M.D., The J.A.M.A., December 13, 1952).

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*Lincoln Hospitals' Tumor Conference. Participating hospitals: Lincoln General, Bryan Memorial and Saint Elizabeth's.

INTERNATIONAL COLLEGE OF SURGEONS PLANNING SURGEONS' HALL OF FAME

Plans for a worldwide Surgeons' Hall of Fame to be established in the world headquarters here of the International College of Surgeons, were announced today in the official Journal of the College.

Nowhere on earth is there any method of commemorating the contributions by surgeons to the life and health of human beings, it was pointed out by Dr. Max Thorek of Chicago, founder and secretary-general of the College, who initiated the project.

For that reason, the announcement said, the Board of Trustees of the College, readily accepted his suggestion and voted to proceed with the plan.

"No scientific body," Dr. Thorek's statement said, "is so well equipped for the task as the International College of Surgeons, which from its very inception has taken the whole field of surgery, as wide as the world and as long as history, for its intellectual homeland.

"The final logic of the plan from our point of view lies in the fact that there is nothing in our charter, our constitution or our by-laws that would confine access to surgeons of any one country.

"We see in the Hall of Fame another signal opportunity to foster international friendship among surgeons and through them among the peoples they serve."

The International College of Surgeons has some 10,000 members distributed among 71 national sections all over the world. The United States section has approximately 5,000 members. Headquarters now is a limestone mansion at 1516 Lake Shore Drive, Chicago, and the College has recently purchased an even larger mansion next door.

The new building, according to present plans, will be the home of the Hall of Fame. Architects are already at work on blue-prints for rebuilding, which will include the design of individual niches for busts of the great surgeons to be commemorated, together with special lighting and bronze plaques detailing their contributions to human welfare.

Those whose feats will be permanently honored will be chosen by vote of an electoral college, with representatives from every part of the world. Names will be submitted to this group by the national organizations or by individual surgeons.

The Board of Trustees for the Hall of Fame consists of:

Rudolf Nissen, M.D., F.A.C.S., F.I.C.S., University of Basel, Switzerland, chairman.

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Raymond Darget, M.D., F.I.C.S. (Hon.), Bordeaux, France.

Felix Mandl, M.D., F.I.C.S. (Hon.), Vienna, Austria.

PREMATURE BABIES' CHANCES OF SURVIVAL INCREASING

Nine out of ten premature babies born today have a chance to survive.

Modern science and great medical advances during recent years have made this possible according to Dr. Edith Potter, Chicago, who is associated with the department of obstetrics and gynecology, University of Chicago, and the Chicago Lying-In Hospital.

However, she added, research is constantly being carried on to find additional ways to prevent prematurity and to help the premature baby adjust to his new surroundings and to attain normal babyhood.

Approximaely a quarter of a million babies are born prematurely in this country each year, Dr. Potter stated in an article in the current Today's Health, published by the American Medical Association. She said prematurity is generally based on the weight of the child at birth, and that those weighing less than five and one-half pounds are considered premature babies.

Although there are many reasons for premature births, in more than one-third of all such cases no cause can be found, Dr. Potter pointed out. Some of the known reasons for such births given by the doctor were multiple birth, hard physical work by the mother during the latter months of pregnancy, improper development of the child, hormone deficiency in the mother, an abnormality of the mother's uterus, and the mother's being underweight at the beginning of pregnancy and not gaining normally during the first few months.

"In general, the healthier the mother and the more complete her diet in required minerals and proteins, the less likely she is to have a premature infant," Dr. Potter stated.

The care of a premature infant, a great factor in its survival, is very intricate, Dr. Potter wrote. A premature baby is immediately put into a heated crib or incubator to protect it from chilling. Oxygen is administered if necessary. The mouth, throat and air passages to the lungs are carefully cleaned out. All food and articles of clothing are sterilized. Only special nursing personnel is permitted near the child, which is kept in a special nursery until it weighs five and one-half pounds.

The principal reason that some premature babies do not survive, according to Dr. Potter, is that their lungs are not sufficiently developed. Other reasons include extreme susceptibility to disturbances in the lungs, injury before birth resulting from the partial cutting off of the oxygen supply received from the mother through the umbilical cord, bacterial infection of the lungs, stomach and intestines or skin, and Rh incompatibility.

Dr. Potter stressed the fact that "the majority of premature babies who live are not handicapped by their prematurity." Within three or four years, it is generally impossible to notice any difference between the mental and general physical development of a premature baby and that of a mature child, she added.

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Vol. 38 March No. 3

THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

THE PHYSICIAN'S ROLE IN VOCATIONAL REHABILITATION

Physicians throughout the state are playing an increasingly important part in the program of rehabilitating physically and mentally handicapped persons so that these disabled individuals may become satisfactorily employed. Through the services provided by the State Department of Vocational Rehabilitation, doctors are furnished with an effective means of helping these disabled people even though they cannot afford to pay for the necessary treatment, guidance, or prosthetic appliances.

Virtually any type of medical care can be supplied to reduce or eliminate vocational handicaps after eligibility and need are established by the department. Medical services are provided as prescribed by physicians and approved by the department's medical consultant. These services include medical and psychiatric examinations and treatment, surgery and hospital care; physical, occupational, and speech therapy; and prosthetic appliances, and medical supplies.

Every applicant for vocational rehabilitation is required to have a general medical examination before any type of service is undertaken. This examination is paid for by the department and is made by the family physician or any doctor whom the client may select. Examinations by specialists, as well as reports of previous examinations and treatment, are obtained when necessary in order to complete the diagnosis. Medical information is used as a basis for determining eligibility, medical services needed, and limitations to be observed in planning vocationally for the disabled person.

All medical services are purchased by the department from general practitioners and specialists who are licensed to practice medicine and surgery in Nebraska. Related services are obtained from private and public facilities that meet standards prescribed for such services. The Medical Fee Schedule approved by the Nebraska State Medical Association is followed in paying for medical services.

Medical diagnosis and treatment are basically important among the benefits provided by the department. In addition, vocational planning, all types of training, training supplies, placement, suitable employment, occupational equipment, and follow-up to assure complete and satisfactory adjustment are furnished. All services are planned and integrated with the objective of assisting the disabled person to become a self-supporting citizen.

The physicians of the state are giving the department excellent cooperation. Referrals from doctors are increasing. Physical restoration services authorized by the department are quite extensive. The effectiveness of the whole program depends, in no small measure, upon these services. Medical rehabilitation, the doctor's part, is a most vital element.

PAUL M. REID, State Supervisor,
Dept. of Vocational Rehabilitation.

SENIOR MEDICAL DAY

The second annual Senior Medical Day will be held this year on March 26 at the Paxton Hotel in Omaha, with Dr. George Lull, Secretary-General Manager of the American Medical Association, as the main speaker.

As you may recall, the first of these programs was held last March and was sponsored by your Rural Medical Service Committee. It met with manifest success; hence, plans have been made to hold the meeting annually. The purpose of Senior Medical Day is to acquaint the senior medical students of Creighton University School of Medicine and the University of Nebraska College of Medicine with the advantages and opportunities of rural practice—in Nebraska. The senior classes of both schools are the honored guests of the state medical association on this occasion.

Another function of this event is to give the students a better understanding of the nature and scope of medical organizations. The basic aim of Senior Medical Day, however, is to encourage these future doctors to return to Nebraska after completing their internships and residencies.

The program starts at 1:30 p.m. and will end with Doctor Lull's address following dinner. Every member of the association is invited to attend and serve as hosts to the senior students. The committee is hopeful that a large number of physicians will be present to properly honor the students. If you plan to attend, please notify the headquarters office, 1315 Sharp Building, Lincoln 8.

A.M.A. STATEMENT ON THE PRESIDENT'S HEALTH COMMISSION

When the Truman Commission on the Health Needs of the Nation released the first volume of its report, December 18, 1952, the American Medical Association announced that a special committee of its Board of Trustees would issue a statement on it at an early date. The committee has now published its report on the recommendations of the commission thus far. It appears in the January 24, 1953, edition of The Journal of the American Medical Association.

Following is a review of the A.M.A. Board of Trustees' statement:

It is recognized that the commission could not thoroughly study the tremendous scope of health problems given it in the one-year allotted. However, the board did not feel justified in withholding criticism on this account since the recommendations of the commission may be given undue weight in future considerations of many important health problems.

The solution proposed by the commission to almost every problem is additional federal money. This always leads to the danger of direct federal control or the necessity of conforming to standards set up by administrative regulations rather than by law. Increased federal expenditures lead to high taxes and more inflation, thus forcing a higher premium on those millions already protected by voluntary insurance plans. The report destroys individual responsibilities for caring for one's own health needs. It demeans the standing of the personal physician by contrasting him to much vaunted groups of highly trained specialists.

The commission failed to meet the issue of the federal government's neglect in coordinating its own health activities. There is little sense in spending millions for civilian hospitals and at the same time build up hospital systems for the armed forces and Veterans Administration beyond the legitimate needs of these agencies, and then competing with civilian hospitals for scarce personnel. In this process, these agencies are competing with themselves and with civilian hospitals by caring for many thousands of patients who rightfully belong in private hospitals. The commission left this question unanswered.

It is recommended that federal subsidies be extended to schools of medicine for construction, renovation, operational costs, elimination of deficits and for scholarships. The A.M.A. is opposed to federal subsidies to medical schools except in the form of one-time grants, thereby protecting the future independence of medical teaching. The public has been presented a series of conclusions and recommendations (on various health problems) not supported by factual data but based on opinions of the commission's members. Furthermore, many of the solutions proposed have already been aired in Congress and rejected.

The report contains 33 recommendations for federal appropriations, most of them being on a matching basis by state and local governments. The commission estimates the federal government's share of these contributions to be a little over one billion dollars, thus the total cost to taxpayers would be more than double this amount. As an economic question, can the people of this country assume this additional tax burden?

In recommending that funds collected through the Social Security System be used to purchase medical care for beneficiaries (now four and one-half million), the commission is advocating national compulsory health insurance. If this were adopted, our health services would inevitably be controlled by "Big Government."

The board is confused by the commission's strong and repeated urging that the health of the American people can only be secured by widespread invasion by the federal government into almost every phase of medical activity.

News and Views

The University of Nebraska has unveiled a picture (sent to Nebraska newspapers) of what its College of Medicine would look like if a proposed expansion program is approved. The proposed six-million-dollar program would include improved facilities for nearly all departments.

University officials said the expansion would allow for: 150 additional beds, training of ten additional students and one hundred nurses per class in addition to a much larger number of technicians that can be trained.

The hospital bed-student ratio at the medical school is less than one-third the standard prescribed by the American Medical Association. Supporters of the proposed expansion are stressing this point. The Council on Medical Education and Hospitals of the A.M.A. sets eight teaching beds per student during the clinical years as a minimum for adequate training. University Hospital has 197 beds. The student enrollment is 338. This averages not quite two and one-half beds per student.

From a wire service:

One thousand young Austrian doctors will appeal to the United Nations unless the Austrian government agrees to their demand for a yearly grant of 12 million schillings (about 490 thousand dollars).

This sum, they claim, is urgently needed to provide an "adequate starvation wage" of $7 a week to newly qualified doctors. At present the plight of young doctors, both in Vienna and in the Austrian provinces is critical. Several hundred are without jobs of any kind, hundreds more are working in hospitals without pay, while a "lucky few" are getting an allowance — a kind of scholarship — of $19.60 a month.

This is an item from The Missouri State Medical Journal:

Clinical Note: Dr. A. C. Richmond, Fort Madison, Iowa, reporting the progress of a case: Robert S., age 18, acute tonsilitis, temperature 104, very septic sore throat. The next day: still very ill, giving him the moldy bread with aspirin in capsules . . . three caspules four times a day. Next day: improvement is unbelievable. I shall give all my patients with fever and infections mold. If I should tell the other doctors about this, they would think I am crazy."

The date: September 9, 10, 11, 1900.

The State Board of Control has submitted to the Legislature a building program totaling $4,900,000 at institutions under its jurisdiction. Largest slice of the total was an appropriation of $1,358,000 earmarked for the Hastings State Hospital. Other large requests included $770,000 for the Lincoln State Hospital and $500,000 for the Nebraska psychiatric unit at the University of Nebraska College of Medicine campus in Omaha.

On January 12, Dr. George Covey, Lincoln, was re-elected Chief of Staff of the Lincoln General Hospital. Dr. John T. McGreer, Jr., Lincoln, was elected Secretary-Treasurer. Other officers selected were the following department chairmen:

Dr. Clayton Andrews, surgery; Dr. Clarence K. Elliott, internal medicine; Dr. Paul L. Peterson, eye, ear, nose and throat; Dr.

Frank P. Stone, orthopedic surgery; Dr. Harry E. Harvey, obstetrics and gynecology; Dr. John H. Barthell, dermatology; Dr. George E. Stafford, pediatrics; Dr. William I. Rotton, oral surgery; Dr. A. D. Munger, urology; Dr. Frank Tanner, pathology and clinical laboratory; Dr. Orvis A. Neely, radiology; Dr. Robert J. Stein, neuropsychiatry; Dr. Allan Campbell, general medicine; and Dr. Frank Cole, anesthesiology.

From the Omaha World-Herald:

The health division of the United Community Services met at the Regis Hotel, Omaha, on January 20 to discuss bills in the Legislature. Speakers were Dr. J. P. Tollman, Mrs. Avis Scholder and Dr. J. Phil Redgwick.

Doctor Tollman, Dean of the University of Nebraska College of Medicine, discussed the budget of the medical school and the proposed building program. Mrs. Scholder, legislative chairman for the Nebraska State Nurses Association, discussed a bill that would license registered nurses. Doctor Redgwick, Chairman of Legislative Committee of the Omaha-Douglas County Medical Society, reviewed a bill providing for a state Board of Health.

Dr. Thomas Fitzgerald, Omaha, presided.

From the Gordon Journal:

The Sheridan County assistance office has been informed by Dr. Cecil L. Wittson, Director of the Nebraska Psychiatric Unit, that the western Nebraska clinic of the unit has been opened at St. Mary's Hospital in Scottsbluff.

This action is being taken jointly by the Board of Control and the University of Nebraska College of Medicine in response to wide-spread expression by community agencies and medical representatives of an acute need for locally available psychiatric services in western Nebraska.

The clinic will provide psychiatric diagnosis, treatment and consultation services for both children and adults. A psychiatric social worker will be on duty each day. A psychologist and psychiatrist will be available for scheduled appointments.

The Shelton, Nebraska, Board of Health and the Village Board of Trustees have taken steps to clean up unsanitary conditions in the community. The action was taken because of the 1952 polio epidemic in the community, coupled with the fear that it might be even worse in 1953 if certain unsanitary conditions are not removed.

Although Shelton has a good sanitary sewer system, there are some 50 outside toilets now in use. The two boards hope to remedy the situation and also look after proper disposal of garbage. They have recommended that all outside toilets be taken down or made fly and rat proof.

The village trustees expect to announce a date for inspection of the outdoor toilets and other unsanitary places in town. Penalties will be assessed against all who fail to comply with their orders.

Community advisory health councils generally should be clearing houses of information on public health, Lincoln - Lancaster County Advisory Health Council members were told January 22.

Mr. Aubrey Gates, field director of the Council on Rural Health of the American Medical Association, said council failures usually result because the councils are so large they die of their own weight or because there is no real need for such a council in a community.

An advisory council should be wary, he said, of attempting to push projects, campaigns or legislation by itself. Work on health problems should be done by those agencies represented on the council, he said.

CURRENT ACTION ON DOCTOR DRAFT

Since the AMA's December meeting, the Department of Defense and the Armed Services have taken steps to revise Public Law 779, the "doctor draft law." Recommended revisions incorporated in a new draft law were approved by the Armed Forces Medical Policy Council and forwarded to the Office of the Secretary of Defense for coordination with military departments. Until agreement has been reached within the Department, contents of the new bill will not be announced.

The new measure presumably will abolish the present categories and classify registrants into two groups: (1) All persons who did not serve in the armed forces during World War II—youngest to be called first; (2) Persons who have served — those with least amount of service to be called first. Also, the bill would provide that special registrants now classified in priorities 1 and 2 would be inducted when they became available for duty. Persons who have served on active duty for 12 months or more subsequent to June 25, 1950, would not be liable for further military service.

Other AMA recommendations which have been acted upon by the Armed Forces Medical Policy Council:

(1) Thorough study of dependent medical care — although a study is warranted, AFMPC reports that further action must be taken by the new Secretary of Defense.

(2) Study of percentage of physician's time spent in treating other than military personnel — study currently is under way.

(3) Revision of physical requirements for physicians being examined for military service—the Department of Defense adopted a new policy which will consider all physicians potentially acceptable for military service provided they can be reasonably productive in the armed forces. Military departments have been directed to re-evaluate physicians previously disqualified. Approximately 2,600 physicians in priorities 1 and 2 will be re-examined.

GAMMA GLOBULIN

It has been reported in the A.M.A. Washington Letter that a panel from the National Research Council will report shortly, on methods of allocation of gamma globulin for next summer's poliomyelitis epidemic. Gamma globulin will be used as previously, in the treatment and prevention of measles and infectious hepatitis. The supply will be limited, consequently allocation will be necessary in the interest of public health.

PRIORITY 3 PHYSICIANS

(From A.M.A. Washington Letter No. 4)

The Army Surgeon General has asked area surgeons in the U.S. to review records of about 1,000 priority 3 physicians who were deferred for physical reasons prior to lowering of physical standards. A number of doctors in this group are expected to be found fit for duty. Generally, the armed services are taking the position that if a doctor is physically able to carry on a private practice then he is fit for military service.

INFLUENZA

The "Weekly Epidemiological Report" from the Pan American Sanitary Bureau of the World Health Organization for February 10th indicates that the number of cases of influenza was still increasing up to the week ending January 24th, with a fifteen per cent increase in deaths from influenza and pneumonia.

The organism which has invariably been identified is virus A-prime. Last year, virus B was the predominant etiologic factor. There were fewer deaths (about fifty per cent) but the disease did not appear until February. The same was true of the A-Prime epidemic of 1951. In the present epidemic twenty-six per cent of the deaths occur before the age of fifteen and forty-two per cent have been over the age of sixty-five years. This is approximately the same mortality distribution as observed when influenza is not epidemic.

FEWER APPLICANTS FOR MEDICAL SCHOOLS

Continuing a three-year trend, the number of students applying for admission to the nation's medical schools declined again this year, according to the official study of 1952-53 applicants by John M. Stalnaker, director of studies for the Association of American Medical Colleges.

Results of the study reported in the February issue of The Journal of Medical Education, show that some 3,150 fewer persons applied this year than in 1951-52 and some 7,600 less than three years ago.

This means that competition among the medical schools for high-ranking student applicants is increasing. Of 16,763 persons who made application last fall, 7,778 were accepted.

A.M.E.F. AWARD TO DR. LOUIS D. McGUIRE

Dr. Louis D. McGuire, Omaha, has been named the first recipient of the American Medical Foundation's Award of Merit. The award was presented to Doctor McGuire on January 25 at the second annual meeting of the foundation at the Sheraton Hotel in Chicago.

Dr. Edwin S. Hamilton, Kankakee, Illinois, a trustee of the American Medical Association and a director of the A.M.E.F., presented the award to Doctor McGuire for his "outstanding contribution" to medical education in the United States. Doctor McGuire was chairman of the Nebraska State Medical Association's A.M.E.F. Committee in 1952.

In presenting the award to the Omaha physician, Doctor Hamilton said:

"On behalf of the officers and directors of the American Medical Education Foundation it gives me great pleasure to present you with the Foundation's first Award of Merit for your outstanding contribution to the preservation and continuance of the high standards of medical education in the United States.

"We know you have set a fine example, both by your own contribution and the contributions of others whom you have persuaded to support the Foundation's program. It is our hope that in the months and years ahead the example you have set will be followed by a great number of your colleagues all over the country."

The award was presented immediately following Doctor McGuire's keynote address before representatives of the A.M.E.F. from 45 states, at which time he said:

"We all know how that great American, President Eisenhower, feels. He believes that state and private sources should accept the responsibility for supplying the additional funds needed by the medical schools. But we do not know what will happen in 1956. American medicine must make good in many ways in the next four years. This is not the time for apathy and complacency . . . federal subsidy of the medical schools will be forthcoming if the doctors and businessmen fail."

During the meeting, the Foundation set a 1953 goal of $2,000,000 as its contribution toward the $10,000,000 needed by the nation's medical schools and which is hoped can be raised in an overall national fund. The remaining eight million is expected to come from industry and other sources outside the medical profession. In 1952, the Foundation received $906,553 from 7,259 contributors, including a grant of $500,000 from the A.M.A.

Announcements

The Department of the Army has announced that it is initiating a program of one-injection vaccination against A-prime virus, which has been found responsible for the present epidemic. This virus is related to strains which accounted for the disease in 1950-51, but in no way related to the pandemic of 1917-18.

FOURTH SUPPLEMENT TO MOTION PICTURE REVIEWS NOW AVAILABLE

The Committee on Medical Motion Pictures of the A.M.A. has completed the fourth supplement to the booklet entitled "Reviews of Medical Motion Pictures." It contains all the film reviews published in The Journal, from January to December 1952.

The purpose of the reviews is to provide a brief description and evaluation of motion pictures which are available to the medical profession. Each film is reviewed by competent authorities.

One copy has been mailed to the secretary of each state medical society. Copies are available to county medical societies on request from: Committee on Medical Motion Pictures, American Medical Association, 535 North Dearborn Street, Chicago 10.

The Chicago Medical Society will hold its 9th Annual Clinical Conference March 3-6, 1953, at the Palmer House in Chicago. This conference program provides a broad view of medicine presented by teachers of considerable renown. For detailed information, address The Chicago Medical Society, 86 East Randolph St., Chicago 1, Ill.

The 1953 Easter seal sale by the Nebraska Society for Crippled Children will be held during the period March 5th to April 5th. Nearly ninety-two per cent of all funds raised in this state will be utilized here to provide local services in physical, occupational and speech therapy, and to expand existing services. Last year this society gave aid to 1,091 handicapped children. Any help we can give for this good cause will be worthwhile and appreciated.

A sectional meeting of the American College of Surgeons will be held in Salt Lake City, Utah, at the Hotel Utah, on March 20-21, 1953. An interesting and instructive program presenting a wide range of subjects will be presented by well known authorities. Write American College of Surgeons, 40 East Erie St., Chicago 11, Illinois for further information.

Hans Selye, M.D., Professor and Director of the Institute of Experimental Medicine and Surgery of the University of Montreal, and Alexander Horava, M.D., co-author of "Annual Reports on Stress," have written respectfully requesting that reprints be sent them immediately by the author of any article dealing with stress reactions. This would include research on stress reactions and articles dealing with the so-called "adaptive hormones," ACTH, STH, corticoids, adrenergic substances, etc. In attempting to review the published data of the whole world in connection with research on this subject, they consider the data from such reprints as of highest importance.

Attention is called to the annual meeting of the American Association of the History of Medicine. It will be held in Columbus, Ohio, in conjunction with the sesqui-centennial celebration of that state, April 10, 11 and 12. All interested are invited. Address Samuel X. Radbill, M.D., 7043 Elmwood Ave., for further details.

The report from the Pan-American Sanitary Bureau, reveals that the etiology of the present influenza epidemic has been identified in various parts of the United States, as virus A-prime. Deaths from this, combined with pneumonia were increasing as of Jan. 10.

COMING MEDICAL EVENTS

ANNUAL SESSION, Nebraska State Medical Association, May 11-14, 1953, Paxton Hotel, Omaha. M. C. Smith, Executive Secretary, 1315 Sharp Building, Lincoln 8.

ANNUAL SESSION, American Medical Association, June 1-5, 1953, New York City, N. Y. George F. Lull, M.D., Secretary, 535 North Dearborn, Chicago 10.

INDUSTRIAL HEALTH CONFERENCE, Nebraska State Medical Association, March 16, 1953, Chamber of Commerce, Omaha. G. Prentiss McArdle, M.D., 1216 Medical Arts Building, Omaha.

LINCOLN-LANCASTER MEDICAL CONFERENCE, Lancaster County Medical Society, March 17, 1953, Cornhusker Hotel, Lincoln. J. A. Brown, M.D., 412 Lincoln Liberty Life Building, Lincoln.

SENIOR MEDICAL DAY, Rural Medical Service Committee, Nebraska State Medical Association, March 26, 1953, Paxton Hotel, Omaha. E. F. Leininger, M.D., McCook.

ANNUAL ASSEMBLY, Omaha Mid-West Clinical Society, October 26-30, 1953, Paxton Hotel, Omaha. Miss Irene Rau, 1036 Medical Arts Building, Omaha.

CRIPPLED CHILDREN'S CLINICS — March 14, Grand Island, St. Francis Hospital; March 28, Broken Bow, High School; April 11, Alliance, St. Joseph Hospital; April 25, Wayne, Benthack Hospital; May 9, Ogallala, Elks Club; May 23, Ainsworth, High School; June 6, Lexington, High School; June 20, Scottsbluff, St. Mary Hospital.

POYNTER FOUNDATION LECTURE and Postgraduate Assembly, University of Nebraska College of Medicine, Omaha, March 24-26, 1953.

POSTGRADUATE COURSE on Medical and Surgical Problems of Newborn and Premature Infants, University of Colorado School of Medicine and the Colorado State Department of Public Health, March 25-27, 1953. Director of Graduate Medical Education, University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver 20.

ANNUAL MEETING, American Goiter Association, Drake Hotel, Chicago, Illinois, May 7-9, 1953. George C. Shivers, M.D., 18½ N. Tejon Street, Colorado Springs, Colo.

ANNUAL MEETING, Nebraska Trudeau Society, Omaha, June 18, 1953. William Nutzman, M.D., Kearney.

IN-RESIDENCE POSTGRADUATE STUDY, University of Nebraska College of Medicine, Omaha. Daily instruction until June 20, 1953. Alumni Secretary or Public Relations Office at the College of Medicine, 42nd and Dewey Streets, Omaha.

NEBRASKA STATE RADIOLOGICAL SOCIETY— March 18, St. Catherine Hospital, Omaha; April 15, Immanuel Hospital, Omaha; October 21, Veterans Hospital, Lincoln.

News from Our Medical Schools

THE CREIGHTON ASSEMBLY

The Fifth Annual Postgraduate Assembly of the Creighton University School of Medicine will be held April 16-17-18, 1953. Though primarily for graduates of the school of medicine, the session is open to all physicians. The first two days of the meeting will take place at St. Catherine's Hospital, Omaha, Nebr., where guest speakers and members of the faculty of the school of medicine will present papers and panel discussions on all phases of medicine. On the third and final day the assembly will convene at the Creighton University School of Medicine, Omaha for scientific exhibits and demonstrations.

Guest speakers, all alumni of the school of medicine, will be Drs. Hugh F. Fitzpatrick, New York, N.Y.; Clarence S. Moran, Mitchell, S.D., and Sylvester N. Berens, Seattle, Washington.

Dr. Fitzpatrick will present two papers: "Portal Hypertension," and "Surgery in Acquired and Congenital Cardiovascular Diseases." A graduate of the class of 1943, Dr. Fitzpatrick served in the United States Navy during World War II. He then attended the graduate school of the University of Pennsylvania School of Medicine. Dr. Fitzpatrick is presently on the staff of the Presbyterian hospital, New York, N.Y.

Dr. Moran, a graduate of the class of 1928, will speak on "The Anemias." After receiving his medical degree, Dr. Moran interned at Creighton Memorial St. Joseph's Hospital, Omaha. From 1933-35 he was an instructor in pathology at the Creighton University School of Medicine. In 1933 Dr. Moran served a fellowship in the Bloodgood Surgical Pathology Laboratory, Johns Hopkins Hospital, Baltimore, Md.

From 1934-35 he was an investigator for the Carnegie Institute. Dr. Moran also served on the staffs of Douglas County, St. Joseph's and St. Catherine's hospitals. From 1942-46 he was Associate Professor of Pathology, Creighton University School of Medicine. During World War II he rose from major to colonel, serving with the United States Army in the Pacific Area. Dr. Moran was certified by the American Board of Pathology in 1941. He is a member of the American Association for the Study of Neoplastic Diseases, the American Society of Clinical Pathologists and the Association for the Study of Internal Secretions. Presently Dr. Moran is associated with Drs. F. J. and Leonard Tobin of Mitchell, South Dakota.

Dr. Berens, who also graduated in 1928 will discuss "The Management of Head Injuries." In 1930 Dr. Berens joined the staffs of Providence and Columbus hospitals, Seattle, Wash. Since 1931 he has been visiting neuro-surgeon, Kings County hospital and in 1932 he joined the staff of Swedish hospital. In 1936 Dr. Berens was appointed to the faculty of the Washington University School of Medicine. Author of numerous articles in various medical journals, Dr. Berens is a member of the American College of Surgeons, the International College of Surgeons, the Kings County Medical Society and the Seattle Surgical Society. Dr. Berens resides in Seattle where his practice is limited to neurological surgery.

In addition to being guest speakers Drs. Berens and Moran will be honored along with other members of the class of '28 at the Jubilee Dinner commemorating the 75th anniversary of the Creighton University.

PROGRAM

ST. CATHERINE'S HOSPITAL

Thursday, April 16, 1953

8:00—Registration.

Earl A. Connolly, M. D., Presiding

8:45—Welcome, Dean Frederick G. Gillick, M.D.

9:00—"Management of Perforated Ulcer," John D. Ewing, M.D.

9:30—"The Surgical and Non-Surgical Ovary," Simon L. Wolters, M.D.

10:00—"Systemic Lupus Erythematosus, New Concepts," John R. Walsh, M.D.

10:30—Intermission.

William L. Sucha, M.D., Presiding

10:45—"Portal Hypertension," Hugh F. Fitzpatrick, M.D., New York, N.Y., Guest Speaker

11:15—"Give 'Em Air in Bulbar Polio," J. Harry Murphy, M.D.

12:15-2:00—Luncheon and Round Table with Adolph Sachs, M.D., Presiding.

Thomas Boler, M.D., Presiding

2:00—"Degenerative Joint Disease, Its Recognition and Management," Charles F. Ferciot, M.D.

2:30—"Varicose Veins in Pregnancy," Walter J. Holden, M.D.

3:00—Intermission.

Robert F. Farrell, M.D., Presiding

3:15—"Surgery in Acquired and Congenital Cardiovascular Diseases," Hugh F. Fitzpatrick, M.D., New York, N.Y., Guest Speaker.

3:45—"Clinicopathologic Aspects of Narcotics and Hypnotics," Stelios C. Samaras, M.D.

4:15—"Treatment of Acute Dermatitis," Ralph O. Ruch, M.D.

4:45—Discussion.

Friday, April 17, 1953

Matthew Severin, M.D., Presiding

9:00—"Pain in Neck and Shoulder," Harold N. Neu, M.D.

9:30—"Trauma to the Abdomen," John E. Courtney, M.D.

10:00—"Physical Manifestations of Psychic Disorders," G. Kenneth Muehlig, M.D.

10:30—Intermission.

Fred J. Schwertley, M.D., Presiding

10:45—"The Anemias," Clarence S. Moran, M.D., Mitchell, S.D., Guest Speaker.

11:15—"The Changing Trends in the Management of Carcinoma and Other Obstructive Lesions of the Colon," Louis E. Moon, M.D.

12:15-2:00—Luncheon and Round Table with Maurice S. Howard, M.D., Presiding.

Bernard V. Kenney, M.D., Presiding

2:00—"Management of Erythroblastosis in the Newborn," Anthony J. Lombaro, M.D.

2:30—"Epistaxis," Herbert J. Herbert, M.D.

3:00—Intermission.

James F. Kelly, M.D., Presiding

3:15—"Management of Head Injuries," Sylvester N. Berens, M.D., Seattle, Wash., Guest Speaker.

3:45-4:45—Clinical Conference, Frank T. Hamilton, M.D., Moderator.

"Medicine," Maurice C. Howard, M.D., Clifford H. Hansen, M.D.

"Surgery," J. P. Cogley, M.D., H. H. McCarthy, M.D.

"Radiology," Arnold Dowell, M.D.

6:30-8:30—Cocktail Party, Blackstone Hotel. Courtesy of Omaha Alumni.

CREIGHTON SCHOOL OF MEDICINE

Saturday, April 18, 1953

8:00—"A" Complimentary Breakfast for Guests in Cafeteria at School of Medicine.

"B" Laboratory and Clinical Research Demonstrations.

Guests will be conducted by guides to the various exhibits. Exhibitors will be present to explain the demonstrations.

1. "Research in Neuroanatomy—Electronic Methods," William T. Niemer, Ph.D.
2. "Visual Methods for Cardiovascular Teaching and Research," Frederick G. Gillick, M.D., and Richard L. Egan, M.D.
3. "Method of Determining Blood Pressure on Dogs with An Auscutatory Method," Charles M. Wilhelmj, M.D.; Vernon W. Meyers, B.S., and Douglas P. Milani, B.S.
4. "Studies on the Metabolism of the Mammalian Erythrocyte by Means of the Warburg Respirometer," Carl Struck, Ph.D.; Arthur Vialpando, M.S.; John Collins, B.S., and Frank Leary, B.S.
5. "Studies on Blood Pressure of Normal Trained Dogs," Charles M. Wilhelmj, M.D.; Vernon W. Meyers, B.S., and Douglas P. Milani, B.S.
6. "Corticosteroids: Their Analysis and Clinical Values," Victor E. Levine, M.D., and Albert Tao, M.S.
7. "An Indirect Measurement of Blood Pressure in the Rat by Means of a Photo-tensiometer," Donald L. Stumpff, M.S.
8. "Determination of (M.E.T.) Minimal Electroshock Thresholds in the Rat," Ira Rosenblaum, Ph.D.
9. "Modification of the Kaolin Method for Routine Concentration and Detoxification of Urine for Pregnancy Tests," Hugh J. Phillips, Ph.D.
10. "The Newt as a Test Animal for Pregnancy," Hugh J. Phillips, Ph.D.
11. "Research on Blood Substitutes," Stelios C. Samaras, M.D., and B. Carl Russum, M.D.
12. "Phagocytosis as Influenced by the Action of Nembutal (R) (Pentobarbital Sodium)," Stelios C. Samaras, M.D., and B. Carl Russum, M.D.
13. "Development of Clevage Line Patterns in the Human Fetus," Joseph H. Cardner, Ph.D.
14. "Demonstrations of Birefringence in Muscle," R. Dale Smith, Ph.D.
15. "Some Uses and Results Obtained with the Phase Microscope," Leo P. Clements, Ph.D.
16. "Experimental Studies of the Pathogensis and Therapy of Viruses," James M. Severens, Ph.D.
17. "Disc Plate Method for the Determination of Bacterial Sensitivity to Anti-Microbial Agents," James M. Severens, Ph.D., and George H. Scherr, Ph.D.
18. "Role of Essential Fatty Acids in the Maintenance of Capillary Integrity (Capillary Resistance and Permeability)," Jeno L. Kramer, M.D.
19. "Effect of Various Forms of Stress on the Capillary Resistance," Jeno L. Kramer, M.D.
20. "Regulation of Capillary Resistance by the Adrenal Cortex (Cortisone)," Jeno L. Kramer, M.D.
21. "Capillary Resistance and Eosinophils," Jeno L. Kramar, M.D.
22. "Evaluation of Hydergine in Peripheral Vascular Disease," William J. Reedy, M.D., and Harold N. Neu, M.D.
23. "The Respiratory Center," William T. Niemer, Ph.D.

CREIGHTON JUBILEE DINNER DANCE, CREIGHTON GYMNASIUM

Doors open at 6:00 p.m. Dinner at 7:00 p.m.

All doctors and their wives invited. Details later from Alumni office. Members of the class of 1928 will be honored at the Jubilee Dinner.

JOHN W. GATEWOOD, M.D., Chm.,
M. WILLIAM BARRY, M.D.,
E. M. WALSH, M.D.,
LEE R. MARTIN, M.D.,
JOHN D. HARTIGAN, M.D.,
JOHN J. GRIER, M.D.

POYNTER FOUNDATION LECTURE AND POSTGRADUATE ASSEMBLY

The University of Nebraska College of Medicine announces the following program for the Seventh Annual Poynter Foundation Lecture and the first in a series of Postgraduate Assemblies which will be held at the College in Omaha on March 24, 25 and 26, 1953.

Dr. David Ivan Rutledge of the Lahey Clinic in Boston will deliver the Poynter Lecture as well as participate with other nationally recognized figures in the Assembly program.

Program for the three-day assembly is as follows:

Tuesday, March 24

8:00—Registration

8:45—Dr. Jahr, Moderator.

9:00—"Sexual Development," Dr. Seckel.
  1. Normal Variation.
  2. Types of Abnormality.

9:45—Discussion Period.

10:00—Intermission.

10:15—"Short Stature," Dr. Seckel.
  1. Types.
  2. Therapy.
  3. Prognosis.

12:00—"Congenital Heart Disease; Diagnostic Criteria of the Various Types," Dr. Rutledge.

1:00—Lunch in the Dining Room.

2:00—"General Principles of Child Psychiatry," Dr. Jensen.

3:00—Discussion Period.

3:20—Intermission.

3:30—"Panel on Child Behavior," Dr. Jahr, Moderator; Dr. Jensen, Dr. Wigton, Dr. Humphreys.

Wednesday, March 25

8:30—"Hernia Through the Esophageal Hiatus Simulating Coronary Pain," Dr. Holoubek.
9:00—"Anemia—A Diagnosis or a Finding?" Dr. Pratt.
9:45—Discussion Period.
10:00—Intermission.
10:15—"Diagnosis and Management of Small and Large Bowel Obstruction," Dr. Hunt, Kansas City.
11:00—Discussion of Dr. Hunt's Paper.
11:15—"Surgical Management of the Acute Abdomen When the Diagnosis of Appendicitis Is Not Substantiated Operatively," Dr. McLaughlin.
12:00—Alumni Business Meeting.
1:00—Lunch in Dining Room; Preceptorship Luncheon Meeting in Staff Dining Room, Dr. Potter, Moderator.
2:00—"Diagnosis and Management of Gastric Lesions," Dr. Hunt, Kansas City.
2:45—"Radioiodine in Evaluation and Treatment of Thyrotoxicosis," Dr. Hunt, Omaha.
3:30—Intermission.
3:45—"An Evaluation of Therapy in Heart Disease," Dr. Rutledge.
4:45—Discussion Period.
6:00—Cocktails, Hotel Fontenelle.
7:00—C. W. M. Poynter Foundation Dinner.
C. W. M. Poynter Foundation Lecture: "Accent on Living," by David I. Rutledge, M.D.

Thursday, March 26

8:00—Registration.
8:30—Introduction, Dr. Anderson, Moderator.
8:30—"The Use of Hormones in Gynecology," Dr. Crossen.
9:20—"Prolonged Labor—Care of the Patient in Labor," Dr. Dieckman.
10:00—Discussion of Papers.
10:15—Intermission.
10:30—"The Physician's Role in Cancer Prevention," Dr. Crossen.
11:10—Ante and Post Partum Care of Toxemic Patients," Dr. Dieckman.
11:50—Discussion of Papers.
12:00—"Recent Developments in Anesthesia," Dr. Barmore.
12:30—Lunch in Dining Room.
1:30—Second Annual Senior Medical Day, Paxton Hotel.

On Thursday evening there will be a joint meeting of the Postgraduate Group and the Omaha Obstetrical Society at 5:30 at the Athletic Club. There will also be a Senior Medical Day Evening Service at the Paxton Hotel, 6:00, with an address, "The American Medical Association — Your Colleague in Practicing Medicine," by Dr. George F. Lull, Secretary and General Manager of the American Medical Association.

The Woman's Auxiliary

READ THE JANUARY EDITORIAL PAGE

If you have not already done so, read the editorial, "The Woman's Auxiliary," on page one of the January issue of the Nebraska State Medical Journal. For the doctor's wife who questions the need of the Auxiliary, for the Auxiliary member who is lukewarm in her enthusiasm, and for the Auxiliary faithful who has spent years in the work of this organization, it is an excellent article. We are especially pleased that these words of encouragement were published at this time. Even the most enthusiastic worker occasionally feels she has reached the end of her usefulness and wonders if the small accomplishment by the great amount of work to be done, makes the effort worthwhile. To receive such praise from our parent organization is the "spring tonic" that we need.

DRIVE 150 MILES TO AUXILIARY MEETING?

Many Auxiliary members feel hard pressed at times to drive ten or fifteen blocks across town to attend a regular Auxiliary meeting. The idea of a one-hundred-and-fifty-mile drive for such an event seems entirely in the realm of the impossible. Your state president knows that it isn't. At the Holt-Northwest Medical Auxiliary and Medical Society meeting held at the home of Dr. and Mrs. Wilbur Johnson in Valentine, Sunday, February 8, Dr. and Mrs. Joseph David, Jr., of Lynch drove more than one hundred and fifty miles to attend the meeting and the same distance to return to their home the next day. Other members drove forty and sixty miles to attend the meeting. Their interest made the trip to Valentine one of the most inspirational experiences of the year for your president.

MIRIAM GARLINGHOUSE, President.

CONVENTION COMMITTEE MEETING

Members of the Convention Committee were guests of their Chairman, Mrs. J. J. O'Neill, at a luncheon and meeting in her home Wednesday, February 4. Members present were Mrs. O'Neill, Mrs. J. W. Gatewood, Mrs. T. T. Smith, and Mrs. Kenneth Muehlig, of Omaha; and Mrs. Hiram Hilton and Mrs. R. E. Garlinghouse of Lincoln. In addition Mrs. James Donelan of Omaha, and

Mrs. Isaiah Lukens IV of Tekamah were present.

The goal of the committee was to plan an interesting series of meetings which would attract the wives of doctors throughout the state. The meetings will be concentrated in two days with Wednesday morning left open. A tentative schedule is printed below. More details will be sent to you at a later date.

WOMAN'S AUXILIARY ANNUAL CONVENTION

Monday Afternoon, May 11—Registration at Hotel Paxton.

Tuesday, May 12—Registration at Hotel Paxton; Executive Board Meeting at Hotel Fontenelle, 9:30 a.m.; Brunch at 11:30 a.m. to 12 for All Doctors' Wives at Hotel Fontenelle; Annual Meeting, 1:00 p.m., at Hotel Fontenelle; Fun Night.

Wednesday, May 13—Free Morning; Luncheon and Fashion Show Honoring National Guest Speaker, 12:30 p.m., at Omaha Country Club; Banquet, Hotel Paxton.

Thursday, May 14—Post Convention Board Meeting; No-Host Breakfast, place to be announced.

PLAN NOW TO COME TO CONVENTION, OMAHA, MAY 11-14

The Holt-Northwest Medical Society and Auxiliary met Sunday, February 8 at the home of Dr. and Mrs. Wilbur Johnson in Valentine. Eight doctors and seven Auxiliary members enjoyed the social hour and dinner which followed. Dr. and Mrs. R. E. Garlinghouse of Lincoln were guests of the group. Following dinner the Auxiliary met for a business meeting. Dues were paid and arrangements were made for showing the movies, "Girls in White" to the high school girls in the four county area. Mrs. Garlinghouse spoke to the group on the accomplishments and plans of the State Auxiliary.

THE SPRINGDALE CAMP

We know there is a great deal of interest among auxiliary members concerning the Springdale Camp for diabetic children. The following is an article written by Dr. Floyd Rogers on this subject.

Springdale Camp for diabetic children is open for two weeks during the middle of June each year. This year the dates will be from June 7 to June 20. This encampment is held at Camp Catron near Nebraska City. Working arrangements have been made with the Girl Scouts who own Camp Catron so that the diabetic group uses their facilities annually at a time when the camp otherwise would not be used. While the camp is designed for Nebraska diabetic children we have accepted a number of young diabetics from other states and anticipate that we will continue to do so. Those wishing to attend should write Miss Anna Smrha, State Department of Health, Capitol Building, Lincoln, Nebraska, for application blanks.

While at the encampment, the children are provided with usual camp activities, and in addition are given intensive instruction in regard to diet.

The number of campers has been increasing each year. It is felt that we are not reaching all the young diabetics who would profit by such experience. The project is supported financially by private donations which have been obtained without any concerted drive. It has been possible to take every child who has applied, regardless of his ability to pay. We anticipate that we can continue to do this. The fee, for those who are able to pay, is $50.00 for the two weeks plus a nominal charge for activity material.

The Nebraska Medical Foundation has received donations from the auxiliaries of Madison Six County and Tri-County No. 1. These donations are to be a part of the Nursing Scholarship Fund to be used for nurse scholarships or loans.

Ord was the locale for the meeting of several doctors and their wives from Garfield, Greeley and Valley Counties.

Dr. M. E. Markley of North Loup was host for the dinner which was served at the Country Club. Mrs. Markley was hostess for the wives during a social evening.

Mrs. James Allen of Tekamah addressed the Tri-County No. 2 Medical Auxiliary in January on the subject of cerebral palsy.

The auxiliary met at the Fremont Golf Club for dinner.

Mrs. R. T. Van Metre presided in the absence of the president, Mrs. Isaiah Lukens of Tekamah.

The Adams County Medical Auxiliary met at the Hastings State Hospital in February.

Mrs. C. W. Guidner reviewed "The Cry and the Covenant" by Morton Thompson.

Mrs. Herbert Anderson presided at the business meeting.

The February meeting of the Lancaster County Medical Auxiliary was held at Lincoln General Hospital Nurses Home on February 2nd. Nurses from all Lincoln hospitals were guests.

Movies from the library of the American Medical Association were shown preceding the business meeting.

Hostesses were Mrs. D. F. Purvis and Mrs. L. J. Gogela. Assistings hostesses were Mesdames F. I. Rose, E. B. Reed, D. S. Rausten, P. L. Peterson, H. O. Paulson, O. J. Parrillo, L. J. Owens, Frank A. Stewart, L. E. Sharrar, W. W. Bartels, L. A. Brown.

Crippled children don't want pity. They want help. Give them that help by giving to Easter Seals.

HOUSE OF DELEGATES

Special Session — January 11, 1953

ADAMS—	
G. P. Charlton, M.D., Hastings	
BOONE—	
Harry C. Henderson, M.D., St. Edward	
BOX BUTTE—	
O. L. Seng, M.D., Alliance	
BUFFALO—	
Wm. E. Nutzman, M.D., Kearney	
BURT—	
R. H. Tibbels, M.D., Oakland	P
BUTLER—	
D. E. Burdick, M.D., David City	
CASS—	
R. R. Andersen, M.D., Nehawka	P
CEDAR, DIXON, DAKOTA, THURSTON AND WAYNE—	
Walter Benthack, M.D., Wayne	P
C. Max Coe, M.D., Wakefield	P
R. P. Carroll, M.D., Laurel	
C. M. Buhl, M.D., Pender	
A. A. Larson, M.D., South Sioux City	
CHEYENNE, KIMBALL, DEUEL—	
C. B. Dorwart, M.D., Sidney	
CLAY—	
H. V. Nuss, M.D., Sutton	
COLFAX—	
H. D. Meyers, M.D., Schuyler	
CUSTER—	
R. D. Bryson, M.D., Calloway	P
DAWSON—	
R. S. Wycoff, M.D., Lexington	P
DODGE—	
R. C. Reeder, M.D., Fremont	
FILLMORE—	
A. A. Ashby, M.D., Geneva	
FRANKLIN—	
L. S. McNeill, M.D., Campbell	
FOUR COUNTY—	
Paul Martin, M.D., Ord	P
GAGE—	
H. D. Runty, M.D., Dewitt	P
GARDEN-KEITH-PERKINS—	
John L. McFee, M.D., Ogallala	
HALL—	
Carl H. Maggiore, M.D., Grand Island	
HAMILTON—	
J. M. Woodard, M.D., Aurora	P
HARLAN—	
L. G. Agee, M.D., Alma	
HOLT AND NORTHWEST—	
Wilber E. Johnson, M.D., Valentine	P
HOWARD—	
J. Y. Racines, M.D., Palmer	
JEFFERSON—	
R. L. Cassel, M.D., Fairbury	
JOHNSON—	
J. A. Lanspa, M.D., Tecumseh	
LANCASTER—	
W. W. Carveth, M.D., Lincoln	P
E. W. Hancock, M.D., Lincoln	P
John T. McGreer, Jr., M.D.	P
R. E. Garlinghouse, M.D., Lincoln	P
LINCOLN—	
A. J. Callaghan, M.D., North Platte	
MADISON SIX—	
George B. Salter, M.D., Norfolk	
I. L. Thompson, M.D., West Point	
W. I. Devers, M.D., Pierce	
R. H. Khotz, M.D., Bloomfield	P
J. D. Reid, M.D., Pilger	
W. W. Graham, M.D., Elgin	
MERRICK—	
R. R. Douglas, M.D., Clarks	
NANCE—	
Kenneth R. Dalton, M.D., Genoa	
NEMAHA—	
Edgar Cline, M.D., Auburn	
NORTHWEST NEBRASKA—	
NUCKOLLS—	
Byron L. Brown, M.D., Superior	P
OMAHA-DOUGLAS—	
Paul S. Reed, M.D., Omaha	P
Raymond J. Wyrens, M.D., Omaha	P
Julius B. Christensen, M.D., Omaha	P
Leroy W. Lee, M.D., Omaha	P
James D. Bradley, M.D., Omaha	P
Arthur J. Offerman, M.D., Omaha	P
Donald J. Bucholz, M.D., Omaha	P
Richard J. Egan, M.D., Omaha	P
OTOE—	
D. D. Stonecypher, M.D., Nebraska City	P
PAWNEE—	
A. B. Anderson, M.D., Pawnee City	P
PHELPS—	
H. A. McConahay, M.D., Holdrege	P
PLATTE—	
E. E. Koebbe, M.D., Columbus	P
POLK—	
C. L. Anderson, M.D., Stromsburg	P
RICHARDSON—	
W. E. Shook, M.D., Shubert	P
SALINE—	
L. W. Forney, M.D., Crete	
SAUNDERS—	
W. W. Noyes, M.D., Ceresco	
SCOTTS BLUFF—	
Douglas Campbell, M.D., Scottsbluff	
SEWARD—	
W. Ray Hill, M.D., Milford	P
SOUTHWEST NEBRASKA—	
F. M. Karrer, McCook	P
THAYER—	
L. G. Buntington, M.D., Hebron	P
WASHINGTON—	
Morris Nielsen, M.D., Blair	P
WEBSTER—	
YORK—	
H. O. Bell, M.D., York	P
Vice Speaker, House of Delegates—	
Fritz Teal, M.D., Lincoln	P

HOUSE OF DELEGATES

The Special Session of the House of Delegates was called to order by Dr. J. D. Bradley, Speaker, at 10:30 a.m., Sunday, January 11, 1953, in the Persian Room, Hotel Cornhusker, Lincoln, Nebraska.

Dr. R. B. Adams, Secretary-Treasurer, stated that inasmuch as there were sufficient delegates to make a quorum, a motion was in order to accept as official the report of the roll call committee as made by the Secretary.

A motion was made that the report, as made by the Secretary, be accepted. The motion was seconded and carried.

Final roll call showed 35 members in attendance.

Doctor Adams asked for permission of the floor, and called for a show of hands in order to obtain the number of luncheon reservations.

Doctor Bradley introduced Dr. J. P. Tollman, Dean of the University of Nebraska College of Medicine to the assembly.

The chair announced that the House of Delegates had been called into special session by Dr. Harold S. Morgan, President, and the Board of Councilors, and that only the business stated in the official call would be considered. He further stated it was planned that both subjects in the call would be presented to the committee chairmen and members, and that the reports and resolutions would be referred to two reference committees which would meet during the noon recess. Discussion and voting would take place in the afternoon session. Plans were that the House of Delegates would adjourn at 12:15, reconvene at 2 o'clock, and be through with the business by 3 o'clock. As the committee reports are received, reference committees will be appointed by the chair, and places and time for meeting will be announced. All members were urged to express their thoughts to the reference committees.

The first order of business was the Interim Report of the Medical Education Committee, and Dr. D. B. Steenburg, Chairman, read the following report:

INTERIM REPORT OF THE MEDICAL EDUCATION COMMITTEE

Dr. Harold Morgan appointed me Chairman of the Medical Education Committee of the Nebraska State Medical Association at the Annual Session last May.

Drs. Earl Leininger of McCook, Charles Sheets of Cozad, Earle Johnson of Grand Island, Floyd Rogers of Lincoln, and H. J. Lehnhoff and F. Lowell Dunn of Omaha, were then appointed to complete the committee.

The first meeting of the Medical Education Committee was held Wednesday, July 30, 1952. The reasons behind the appointment of this liaison committee were discussed and the purpose of the meeting was considered to be discussion with the hope of resolution of the following problems:

1. The imminent possible loss of standing of the College of Medicine of the University of Nebraska due to the unfavorable report of the inspection lately made by the committee of the American Medical Association and American Association of Medical Colleges critical of the college in many phases of the teaching program, lack of sufficient number of teaching beds, lack of clinical material and especially the lack of full-time teaching personnel.

2. The state-wide demand for more doctors, especially those interested in general practice, to man the many newly constructed hospitals. There is, also, the continuing shortage of nurses and medical technicians.

As the first step in the solution of these problems, it was decided that the committee undertake a personal survey of the neighboring "Great Plains" medical schools. Further, it was agreed that a questionnaire be formulated and sent to the dean of each school on the list of those to be visited, together with a letter of introduction from our own Dean Tollman, prior to the visitations by the various members of the Committee. The list of the schools and the visitor selected are as follows:

University of Arkansas—Dr. Morgan
University of Oklahoma—Dr. Morgan
University of Colorado—Dr. Rogers
University of Iowa—Dr. Sheets
University of Kansas—Drs. Dunn and Steenburg
University of Minnesota—Dr. Leininger
University of Missouri—Dr. Lehnhoff
University of Utah—Dr. Johnson
University of Oregon—Dr. Johnson
University of Nebraska—Whole Committee

The committee feels that the trips were very valuable and that much information was obtained on all the various aspects of our problem. Especially at the University of Nebraska College of Medicine a thorough survey of the physical plant was made. The Children's Memorial Hospital was also visited. In the evening we held a dinner meeting at the Omaha Club to which were invited members of the Executive Committee of the College of Medicine, including the Dean of the College of Medicine and Chancellor Gustavson. Also present were Doctor Tyson of the Veterans Facility, and Mr. Philip Vogt, Omaha. A general discussion followed the dinner with emphasis on the "hard core" beds, and the beds in Omaha in other hospitals.

On the 26th of October a meeting was held at Dr. Earle Johnson's farm home north of Hordville with Chancellor Gustavson and Dean Tollman in attendance. General discussion developed a better understanding of medical school problems.

On the 7th of November Chancellor Gustavson again met with the committee and generally discussed the shortcomings of the College of Medicine as detailed in the report just received from the inspection team sent out by the American Medical Association and American Association of Medical Colleges. Following the discussion of Chancellor Gustavson's report, Doctor Rogers proposed a ten-point program be adopted for committee action. Doctor Leininger seconded and the motion prevailed.

Following are the ten points:

1. Consider the problem of medical education in Nebraska in a broad sense with the objective of soon having a high class medical school with the lowest possible tax load and without undue withdrawal from other departments of the university and without criticism of the many who have carried the load of our medical school in the past.

2. Visit other state medical schools of neighboring states in an effort to more clearly understand what other states are doing, and, in so far as possible, gain from their experience.

3. Study the present status of our own medical school. Do this by study of reports of past surveys, in particular those of the Council on Medical Education and Hospitals of the American Medical Association; by conferences with the Board of Regents, Chancellor, Dean and others; and by personal visits to our own medical school.

4. Attempt to form an unbiased opinion of what our state needs in the way of a medical school, being mindful of the cost.

5. Prepare broad recommendations as to immediate needed changes which could be instituted in our medical school prior to any building program.

6. Take these recommendations to the Board of Regents for further conference and alteration.

7. If agreement can not be reached with the Board of Regents, continue our studies and negotiations.

8. If agreement is reached with the Board of Regents, prepare a brochure giving full information as to our medical school's present status, information in regard to an adequate building program, this to be supported by general information, including, in particular, the information which has been derived from our visits to the other medical schools of this area. This brochure is to be used by the House of Delegates and the Nebraska Legislature.

9. Ask the House of Delegates, in special session, to pass a resolution requesting the Legislature to provide for immediate provision of funds to make possible the operational changes which are recommended, and to request the Legislature to provide funds for an adequate building program at an early date.

10. Request all members of the Nebraska State Medical Association to support this resolution in the Legislature.

The Medical Education Committee was invited by Chancellor Gustavson to meet with the Board of Regents in regular session Saturday, January 10, 1953, so that the following nine proposals might be presented and discussed fully with the Board of Regents.

1. The Board of Regents, through channels, reorganized, if necessary, the medical school's staff procedure, with the broad objective of providing strong authority and responsibility in the Chancellor and the Dean.

2. At an early date, employ full-time teachers in not less than four fields of medicine; namely, medicine, surgery, obstetrics and pediatrics. These full-time teachers should have such qualifications as would permit them to assume chairmanships of their respective departments within a reasonable time. They should be under forty years of age, and should have had their specialty training in some teaching center other than Nebraska.

3. These full-time teachers may be allowed consultation practice in the University Hospital. Detailed plans of this consultation practice shall be worked out annually by the Dean and the Medical Education Committee of the Nebraska State Medical Association.

4. A member of the Medical Education Committee shall be a full member of the Executive Committee of the faculty of the medical school.

5. The Board of Regents, through the Chancellor, Dean, Staff, medical profession, and lay groups, shall make every effort to bring into full use the potential teaching resources of Omaha; specifically, the Children's Memorial Hospital, the Douglas County Hospital, the Veterans Hospital, the psychiatric unit, and other private hospitals in Omaha.

6. The Board of Regents should continue to encourage the use of all medical teaching facilities in the state outside of Omaha; i.e., preceptorships, Lincoln hospitals, the Orthopedic Hospital, the Hospital for Tuberculous, and others.

7. Any additional private hospital building on the College of Medicine campus shall include at all times the following stipulations in the contract agreement:

a. Seventy-five percent or more of the medical staff shall be members of the Faculty of the College of Medicine.

b. The hospital administrator and the superintendent of nurses shall be fully approved by the College of Medicine.

c. Beds shall be made available for undergraduate teaching.

d. Adequate space shall be provided for the educational program.

8. The present policy of the Board of Regents of presenting an itemized budget to the Legislature, together with an itemization of what portions of the University operation would be omitted in case of budget cuts by the Legislature should be continued. The objective is to clearly define the College of Medicine budget through the period of legislation and afterwards. This budget should be deviated from only in the case of unusual or emergency circumstances.

9. Efforts should be made and continued to explain to the public the portions of the College of Medicine budget that are used for education and research, and the part that is used for patient care in the University Hospital and Clinics.

CONCLUSIONS

Step by step your Medical Education Committee has moved toward a possible solution of the problems outlined earlier in this report. We have a continuing task to perform in supporting and assisting in the many changes necessary, if we are to meet the requirements of the American Medical Association and the American Association of Medical Colleges rating committee. It is the considered opinion that on a long range basis we should work toward a MEDICAL CENTER plan so well exemplified at the University of Kansas. After a thorough discussion of the problem, we hope to have your approval in the form of a resolution requesting the Legislature to provide for immediate provision of funds to make possible the operational changes which are recommended, and to request the Legislature to provide funds for an adequate building program at an early date. We would further ask your help, aid and assistance in disseminating this idea among your colleagues and friends.

Respectfully submitted

D. B. Steenburg, M.D., Chm.,
C. H. Sheets, M.D.,
Earl Leininger, M.D.,
Floyd L. Rogers, M.D.,
Henry J. Lehnhoff, M.D.,
Earle G. Johnson, M.D.,
F. Lowell Dunn, M.D.

Dr. James Kelly was given permission of the floor.

Doctor Kelly stated that, as President-Elect, he thought it was a good point to discuss what appears to be a unilateral action of the Medical Education Committee at this time. He stated that there was no reference in this work as regards Creighton University School of Medicine and that some of the members thought some of the Creighton graduates over the state would misunderstand that attitude. He pointed out that it was perfectly obvious, at least to him, that this action pertains to the unfavorable reports from the committee of the American Medical Association and the American Association of Medical Colleges.

He informed the House that as President-Elect he had been an ex-officio member of the Committee on Medical Education and assured everyone that this action, as taken by the committee, is considered in no way to reflect an unfavorable attitude to the Creighton University School of Medicine, and that the committee is willing to give time to help Creighton at any time if the school ever gets into this predicament. He stated they are short of faculty and full-time teachers but was hopeful that Creighton would not need this help; however, he wanted to again assure the House that the committee will help Creighton in every way possible if they need it. As a graduate of Creighton, he could see nothing in this work that in any way reflects neglect of the Creighton University School of Medicine.

He further stated that we are all citizens of Nebraska, and that the University of Nebraska College of Medicine is our school; that we should do everything we can to get the Legislature to see that this program is fully supported at this time.

He was sure the committee is interested in Creighton and will help Creighton at any time they need it.

Dr. Floyd Rogers was called upon by the chair to give further details relative to the ten-point program which was adopted by the committee and formerly read by Doctor Steenburg.

Doctor Rogers stated that at the first meeting of the committee it was considered of utmost importance that the position of the committee in relation to the medical school and to the citizens should be definitely clarified. The committee concluded that the medical profession in the state, as represented by this committee and the Nebraska State Medical Association, should make no attempt to operate or dictate any of the scholastic operation of the medical school. The decision was definitely reached that the committee should act as a fact-finding body and should represent the medical profession and the citizens of the state by dealing directly with the Board of Regents and the Legislature. The study which has been conducted and developed by the committee has resulted in a volume of information and facts which is of inestimable value in analyzing the situation of our medical school.

He stated that under point two the committee set out to visit other medical schools. In order to make the trips possible, it was necessary to have the cooperation of the Chancellor and Dean, and the committee received the wholehearted cooperation of both. They assisted the committee immeasurably in arranging interviews at the various schools visited. Dean Tollman prepared a questionnaire and wrote letters to the deans of the schools to be visited, which act made unlimited information available to the visiting member of the committee. The members of the committee made these visits at their own expense. No agreements were made with anyone. The stated function of the committee was maintained in merely collecting valuable information from each school visited.

In commenting on the report, Doctor Rogers stated that it was the feeling of the committee that the responsibility of the entire situation belongs to all of the doctors of the state. The committee has acted merely as representatives in presenting certain information and conclusions which are considered important. The members of the medical profession in Nebraska have the right to accept, or reject, or alter the activities of this committee.

The other points of the ten-point program were considered by Doctor Rogers to be self-explanatory.

In closing his report, Doctor Rogers stated that the committee had arrived at some very definite and firm conclusions which are a result of the investigations and comparisons made with other medical schools. A medical school is made up of a lot of different things — buildings, patients, deans, staff, chancellor, board of regents, et cetera — but the most important block in the building of the medical school is the wholehearted cooperation of the medical profession in the state. The committee has concluded that the situation of our own college of medicine is extremely serious. He asked if the medical profession in the state were ready to pitch in and do their part in building up the medical school. The burden is placed very definitely on the House of Delegates and the doctors in the State of Nebraska.

Dr. Earl Leininger presented and discused the following tables of data compiled in the study made by the committee — a copy of which was presented to every delegate present.

TABLE I

	Hospital Beds	Patient Days	Medical Students
Uni. of Nebraska College of Medicine	197	3,621	338
Uni. of Arkansas School of Medicine	204	7,297	340
Uni. of Colorado School of Medicine	826	14,016	301
State Uni. of Iowa College of Medicine	891	19,367	395
Uni. of Kansas School of Medicine	474	10,419	367
Uni. of Minnesota Medical School	553	10,330	478
Uni. of Oklahoma School of Medicine	464	8,986	280
Uni. of Oregon Medical School	464	7,904	291
Uni. of Utah School of Medicine	454	7,188	202

(Compiled from Report of Council on Medical Education and Hospitals, J.A.M.A., September 8, 1951).

TABLE II

STATE	1950 Population	No. 1951 Students Uni. Med. Schools	Population Per Student
Arkansas	1,909,511	340	5,616
Colorado	1,325,089	260*	5,096
Iowa	2,621,073	395	6,635
Kansas	1,905,299	367	5,191
Minnesota	2,982,483	487	6,239
Nebraska	1,325,510	338	3,921
Oklahoma	2,233,551	280	7,976
Oregon	1,521,341	291	5,228
Utah	688,862	202	3,410
Average			5,479

*Colorado also educates sixty medical students from adjoining states; these states pay Colorado for the cost of their education (approximately $2,600.00 per year).

TABLE III

FULL TIME FACULTY IN SELECTED STATE UNIVERSITY MEDICAL SCHOOLS

Department	Neb.	Ark.	Colo.	Ia.	Kan.	Okla.	Utah
Basic Science Departments:							
Pathology and Anatomy	3	6	7	8	4	8	4
Biochemistry	3	5	7	8	3	5	16
Physiology	2	6	5	11	5	5	3
Pharmacology	1	-	3	5	3	3	6
Bacteriology	7	4	7	5	-	4	9
Pathology and Clinical Pathology	-	4	13	6	8	7	4
Basic Science Totals	16	25	42	43	23	32	42
Clinical Departments:							
Medicine	-	9	19	22	8	7	11
Surgery	1	4	11	15	8	1	4
Obstetrics	-	6	6	4	-	-	2
Dermatology	-	-	-	3	-	-	-
Urology	-	-	1	3	-	-	-
Orthopedics	-	1	2	5	1	-	-
Ophthalmology	-	-	-	4	1	-	-
Otorhinolaryngology	-	-	-	6	1	-	-
Radiology	-	3	4	6	1	1	4
Pediatrics	1	3	11	8	-	2	3
Clinical Department Totals	2	26	54	76	20	12	24

(Compiled from studies made by Medical Education Committee, 1952).

TABLE IV

	Medical Students	Nursing Students	Continuation Courses	Technicians
Nebraska	338	197	----	13
Arkansas	340	----	345	29
Iowa	395	203	261	69
Kansas	367	151	1658	116
Minnesota	478	294	1477	----
Oklahoma	280	123	450	13
Oregon	291	392	182	----
Utah	202	146	89	----
Colorado	301	213	226	46

	Interns	Residents	Total, Less Medical Students	Total
Nebraska	9	47	310	648
Arkansas	8	48	440	780
Iowa	20	124	1640	2035
Kansas	18	60	3351	3718
Minnesota	29	299	5282	5760
Oklahoma	48	55	770	1050
Oregon	18	64	687	978
Utah	13	57	1507	1709
Colorado	32	131	938	1239

(Compiled from J.A.M.A., September 5, 1951. Medical Education in the United States and Canada. Several columns were omitted, but these are included in the column "Total, Less Medical Students" and the final column includes all teaching activities associated with the school).

The Speaker called upon Dr. Earle Johnson, member of the committee and also a member of the Board of Regents, to discuss the proposed medical center.

Doctor Johnson first pointed out the high class of work that has been done by the voluntary staff of the University of Nebraska College of Medicine. He stated that without this — the hours of work of the voluntary staff — we would not have a medical school of any kind at this time.

He pointed out the value of a medical center whereby Nebraska would have the facilities for major surgery, such as cancer of the lung, blue babies, cardiac surgery, et cetera, which are not now available to the citizens of Nebraska unless they are referred to some eastern medical center far from our state. He expressed a hope that we could build such a medical center in Nebraska. He pointed out the very excellent nucleus of such a center which is now available with the primary plant of the College of Medicine in Omaha and surrounded by many hospitals where teaching, as well as research work, could well be carried on.

Reviewing the present situation of the College of Medicine, Doctor Johnson pointed out that Nebraska is at the bottom of the list by any measure that is used, and deplored that such a situation should exist. He quoted Governor Val Peterson who said that this school is in this position because of continued neglect. That neglect has been the lack of funds and the ability to add facilities as they are needed. He stated that one of the great needs of a medical school is to provide more doctors, interns and residents, technicians, and nurses, so that we might be able to supply the personnel to the many new hospitals that have been built over the state.

In closing, Doctor Johnson again expressed appreciation to the voluntary staff of the medical college of Omaha men who have carried the burden of the medical school so long, and stated that such work and services are by no means unrecognized by the University of Nebraska. He said that the school authorities have recognized the fact that an emergency exists and there must be a certain amount of reorganization in providing full-time teachers and to bring the College of Medicine up to the level of surrounding medical schools. The Board of Regents has instructed the executive officers of the University of Nebraska to see to it that bills are introduced in the present Legislature asking for building funds and an increased budget for the school.

Dr. Lowell Dunn was called upon to discuss the necessity of teaching beds.

In his discussion, Doctor Dunn pointed out the necessity for having a specified number of teaching beds which are controlled entirely by the medical school. Accrediting authorities have agreed upon the number of such beds necessary in direct proportion to the number of students. In addition to the control of teaching beds, it is necessary to have a number of private beds which may also be used for teaching purposes.

He discussed also the question of rating of a medical school. Since there seems to be a certain amount of aversion on the part of some individuals to have so-called outsiders come into our state and dictate our teaching policies, he pointed out that the inspections that were made of our medical school, as well as all other medical schools, were made on a basis of the doctors themselves inspecting the teaching facilities of all of the schools; in other words, it is more a matter of self-inspection on a national basis.

Doctor Dunn also discussed the necessity of providing some type of limited practice for full-time teachers so that the salary of these teachers might be supplemented in such a manner that it is approved by the doctors in the state. He said this could well be handled between the medical association and the College of Medicine, which will prevent a lot of difficulties that may occur.

Doctor Bradley stated that the Interim Report of the Medical Education Committee would be referred to the reference committee.

Doctor Steenburg was again granted permission of the floor and read the following resolution:

RESOLUTION

WHEREAS, There has been a marked change in the concept of medical education, brought about by the innumerable advances in medical science during the past two decades, and

WHEREAS, The teaching of medical students, the training of nurses and technicians, the conduct of research, and the promulgation of postgraduate education are the essential functions of a modern medical school, if it is to justify its value to the citizens of the state, and

WHEREAS, The medical school must have adequate financing, and adequate facilities to properly discharge its obligations to the people of the state, and

WHEREAS, The Medical Education Committee of the Nebraska State Medical Association has, at its members individual expense, conducted investigations of the medical schools of the Universities of Colorado, Iowa, Kansas, Oklahoma, Arkansas, Minnesota, Utah, Missouri, and Oregon, as well as the University of Nebraska, and

WHEREAS, The results of these investigations show conclusively that the University of Nebraska College of Medicine is below the standard of an acceptable medical school, and that it is far below the standard of any of the schools visited insofar as available clinical material, adequate facilities for training of well qualified medical students, nurses and technicians, and likewise that it is lacking in the number of full and part-time teachers necessary for the type of teaching demanded of medical schools today, and

The University of Nebraska College of Medicine suffers in comparison with its neighboring states and others in its research and postgraduate education programs, and

WHEREAS, It is the opinion of the House of Delegates of the Nebraska State Medical Association that a properly planned and financed medical center will materially benefit the citizens of the state through the provision of better trained doctors to serve the several communities of the state through the provision of more nurses and more technicians to staff the many new hospitals of the state, and through an augmented research and postgraduate program;

THEREFORE BE IT RESOLVED, That the Nebraska State Medical Association respectfully direct the attention of the Governor and the Nebraska Legislature to the serious deficiencies of the medical school at the University of Nebraska, and

BE IT FURTHER RESOLVED, That the Nebraska State Medical Association make available to the Governor and the Nebraska Legislature, or any of its committees, all data and information obtained by its Medical Education Committee that will be of assistance in determining the needs of the medical school and medical centers, and

BE IT ALSO RESOLVED, That the Nebraska Legislature specifically appropriate funds for the medical school.

Doctor Bradley announced that the resolution would be accepted in its entirety and would be referred to the reference committee handling the Interim Report of the Medical Education Committee.

Dr. Harold S. Morgan, President, presented the following resolution:

RESOLUTION

WHEREAS, The Medical Education Committee of the Nebraska State Medical Association has studied the immediate problems facing the University of Nebraska College of Medicine, and

WHEREAS, The committee has been impressed with the loyalty and devotion and untiring efforts of the faculty of the medical college since its inception in providing excellent teaching leadership in the face of inadequate facilities, clinical materal, and financial shortage;

THEREFORE BE IT RESOLVED, That the House of Delegates of the Nebraska State Medical Association, in special session assembled on January 11, 1953, give praise and commendation to the faculty for its service to the people of the state, its devotion to the young men and women studying medicine, and recognition of the sacrifices entailed in the carrying out of these voluntary obligations.

This resolution was also referred to the reference committee by the chair.

Doctor Bradley then appointed the following reference committee:

Reference Committee No. 1—Medical Education Committee Interim Report and Resolutions—

R. S. Wycoff, M.D., Lexington, Chairman
Walter Benthack, M.D., Wayne
Paul Martin, M.D., Ord
Leroy W. Lee, M.D., Omaha
E. W. Hancock, M.D., Lincoln

A motion was made by Dr. D. D. Stonecypher that Reference Committee No. 1, as selected by the chair, be confirmed and accepted. The motion was seconded by Dr. A. J. Offerman and carried.

The next order of busines was the report of the Polio Coordinating Committee by Dr. Harold N. Neu, Chairman.

Doctor Neu, Chairman of the Polio Coordinating Committee appointed by Doctor Morgan to study the polio problem in Nebraska, reported the actions of his committee. He opened his discussion by briefly presenting the picture of polio in the state during the past year. He stated there were 2,240 cases of polio, and with the average incidence of paralysis of fifty per cent of those, approximately 1,120 had some degree of paralysis during this last epidemic. Normally, 550 will, with good medical care, completely recover and be able to pursue a normal existence—which leaves a total of approximately 550 to be accounted for. Of this group, 110 died leaving 440 people who are still seriously involved. We still have another group of approximately two thousand who had polio and will have to have some consideration or follow-up care.

In the past, he stated, polio has been neglected or many times considered the problem of the National Foundation for Infantile Paralysis. The problem is becoming larger each year so that we can not dismiss it so lightly, and it behooves the medical profession to support and direct the future action which can be taken because the incidence in succeeding years may be as large or larger.

Doctor Neu said it is recognized that rehabilitation measures must be instituted early. Therefore, a lot of patients must be shifted to other institutions, and it would seem necessary to have centers to handle acute cases and later shift them to a rehabilitation center when they are ready for such a move. This would seem to provide better medical care for those patients in the acute stages and also early rehabilitation.

Doctor Neu stated that the Polio Coordinating Committee had prepared a group of resolutions to be presented to the house of Delegates covering the problem as discussed. The following resolutions were then presented by Doctor Neu:

RESOLUTIONS OF THE POLIO COORDINATING COMMITTEE

I.

WHEREAS, at the end of the 1952 poliomyelitis epidemic, the number of respiratory patients and seriously involved patients still under care in the state is very large and that facilities must be designated to take care of these long term cases;

THEREFORE, BE IT RESOLVED, that the following centers be so designated:

A. That the respiratory and seriously involved treatment unit be set up at Creighton Memorial St. Joseph's Hospital in Omaha, that being the only general hospital in the Omaha area which is available for that purpose.

B. That the University of Nebraska consider setting up a similar ward, particularly for adults.

C. That the State Orthopedic Hospital be used as a center for the care of respiratory and other seriously involved patients under 21 years of age, but that admission to the Orthopedic Hospital for such care be limited to patients under 21 years of age who have been declared eligible by the Crippled Children's Services. Furthermore, that these centers, if and when set up, be provided with adequate personnel and equipment to insure the best possible care for these patients, and that the funds of such foundations as the National Foundation for Infantile Paralysis be utilized wherever possible.

II.

WHEREAS, There have been misunderstandings concerning the admission policies of State Orthopedic Hospitals;

THEREFORE, BE IT RESOLVED, That the Nebraska State Medical Association investigate the admission policies of the State Orthopedic Hospital with particular reference to the following points:

A. The method of admission of polio patients under 21 years of age suffering with chronic after effects of anterior poliomyelitis.

B. The policy of admitting cases of acute poliomyelitis who are able to pay for care or who have insurance which covers their care.

C. The policy of admitting pay cases and charging medical fees in competition with private practitioners.

III.

WHEREAS, The follow-up care of poliomyelitis patients has been unsatisfactory;

THEREFORE BE IT RESOLVED, That the House of Delegates recommend their preference for one of the following plans for the follow-up care of poliomyelitis patients:

A. That the State Crippled Children's Service set up a series of clinics to be financed by the National Foundation for Infantile Paralysis to which all patients regardless of age or financial status could be referred for examination. No treatment would be given at these clinics, but efforts should be made to get all patients under treatment who are found to be in need of it.

B. That the Nebraska State Medical Associaion conduct a campaign designed to induce all patients who have had a diagnosis of poliomyelitis to report to their own doctors or to some other existing facility for such an examination. This plan would probably involve a program of education for doctors on the significant findings to be looked for. Under this plan the outstate and permanent clinics of the Crippled Children's Service would be available as at present, for patients under 21, and on a medical referral.

After reading three of the resolutions to be presented, Doctor Neu then stated he would like to express his opinion in regard to No. III and would recommend the first plan, or Plan A, for the following reasons:

1. It would be more effective and actually get these patients looked after.
2. It would permit a utilization of the funds of the National Foundation for Infantile Paralysis in such manner that they can be properly followed up.

Doctor Neu then continued his report.

IV.

WHEREAS, The committee feels that the further education of physicians in the field of poliomyelitis is desirable;

THEREFORE BE IT RESOLVED That multiple poliomyelitis institutes be sponsored by the Speakers Bureau and set up on a Councilor District Basis.

V.

WHEREAS, The number of cases studied under control experiments in the use of Gamma-globulin is still limited;

THEREFORE BE IT RESOLVED, That all Gamma-globulin available for use during the coming year 1953 be used in control experiments to further clarify the value and use of Gamma-globulin. It is further recommended to the Nebraska State Medical Association that appropriate releases regarding the status of Gamma-globulin be given to the lay press and appropriate publications, radio, television, etc., at periodic intervals as the Nebraska State Medical Association's Polio Coordinating Committee meets and that the profession be informed on the current opinions of the committee.

Doctor Neu closed his report by giving a group of figures and statistics relative to the serum now being used, and pointed out that in case of another epidemic similar to the one experienced in Nebraska during the past year, there would probably be a shortage of approximately four and one-half million cubic centimeters, then referred back to Resolution

V of the committee which was prepared as a partial corrective measure.

The chair ruled that the report of the Polio Coordinating Committee and resolutions would go to Reference Committee No. 2. The personnel of this committee was named as follows:

E. E. Koebbe, M.D., Columbus, Chairman
John T. McGreer, Jr., M.D., Lincoln
R. H. Kohtz, M.D., Bloomfield
Wilber E. Johnson, M.D., Valentine
J. B. Christensen, M.D., Omaha

A motion was made by Dr. A. J. Offerman that the appointments on Reference Committee No. 2 be confirmed. The motion was seconded by Dr. Leroy Lee and carried.

Doctor Bradley again asked that anyone having anything he wished to say relative to the reports should come before the committees at their meetings. He further stated that Reference Committee No. 1 would meet in the Persian Room and that Reference Committee No. 2 would meet in the adjoining room, or the Georgian Room.

A recess was declared until 2 p.m.

The special session of the House of Delegates was again called to order by Dr. J. D. Bradley, Speaker, at 2 p.m., in the Persian Room, Hotel Cornhusker.

Doctor Bradley made the announcement that if delegates had not signed registration slips to be sure and do so in order that everyone would be included in the official roll call.

Doctor Tollman, Dean, University of Nebraska College of Medicine, and guest at the session, was given permission of the floor.

Doctor Tollman discussed the situation at the medical college at some length and outlined plans and means for improving the effectiveness of the school.

The report of Reference Committee No. 1—Medical Education Committee reports and resolutions—was called for by the chair and Doctor Wycoff, Chairman, gave the folowing report:

> "Your committee met following the morning session, and have reviewed the interim report of the Medical Education Committee that was so ably presented by Doctor Steenburg. The committee wishes at this time to particularly commend the efforts of this committee, who, at their own expense, have so carefully and completely studied the problems confronting our medical school; and have also spent much time and effort in study of the medical schools of our neighboring states.
>
> "Your committee feels that the problems of the University of Nebraska College of Medicine are so completely presented in comparison with the situation of the medical schools of surrounding states that there remains nothing to be added to it.
>
> "Mr. Speaker, I move the adoption of the Interim Report of the Medical Education Committee."

The motion was seconded and discussion called for.

Dr. K. S. J. Hohlen asked for permission of the floor and stated that he felt point No. 4 of the nine proposals should be explained a little more fully.

Doctor Floyd Rogers stated that the member of the Medical Education Committee would make a report annually to the House of Delegates so that at all times the House will have information and data relative to the medical school.

Dr. Byron Brown was granted permission of the floor. He discussed the present situation regarding general practice and the practice of specialties. He felt that more attention should be given in a medical school to the training of general practitioners, since there was a greater need of this type of practice in Nebraska. He felt that there should be more interns and residents provided in the various hospitals for general practice so that students who are interested in general practice could get into a small town with a better basic knowledge of the practice of medicine since he is called upon to see cases and practice a type of medicine entirely different than he anticipates when he is in school, and under the direction of specialists.

He felt that perhaps many of the large industries might be interested in making contributions for medical education to carry out higher standards in teaching.

Doctor Bradley called the attention of the House to the fact that there was a motion before them and stated that the question to be voted on was the acceptance of the Interim Report of the Medical Education Committee and that "yes" means the House accepts the report as read.

The question was called for and the motion carried.

Doctor Wycoff continued his report as follows:

> "In presenting the resolution to the Legislature, the committee wishes to suggest that the last "BE IT RESOLVED" be changed by adding after the word 'Legislature' the words 'be requested to,' thus making that paragraph of the resolution read as follows:
>
> " 'BE IT ALSO FURTHER RESOLVED, that the Nebraska Legislature be requested to specifically appropriate funds for the medical school.'
>
> "I will read the resolution only as amended:

RESOLUTION

WHEREAS, There has been a marked change in the concept of medical education, brought about by the innumerable advances in medical science during the past two decades, and

WHEREAS, The teaching of medical students, the training of nurses and technicians, the conduct of research, and the promulgation of postgraduate education are the essential functions of a modern medical school, if it is to justify its value to the citizens of the state, and

WHEREAS, The medical school must have adequate financing, and adequate facilities to properly discharge its obligations to the people of the state, and

WHEREAS, The Medical Education Committee of the Nebraska State Medical Association has, at its members individual expense, conducted investigations of the medical schools of the Universities of Colorado, Iowa, Kansas, Oklahoma, Arkansas, Minnesota, Utah, Missouri, and Oregon, as well as the University of Nebraska, and

WHEREAS, The results of these investigations show conclusively that the University of Nebraska College of Medicine is below the standard of an acceptable medical school, and that it is far below the standard of any of the schools visited insofar as available clinical material, adequate facilities for training of well qualified medical students, nurses and technicians, and likewise that it is lacking in the number of full and parttime teachers necessary for the type of teaching demanded of medical schools today, and

The University of Nebraska College of Medicine suffers in comparison with its neighboring states and others in its research and postgraduate education programs, and

WHEREAS, It is the opinion of the House of Delegates of the Nebraska State Medical Association that a properly planned and financed medical center will materially benefit the citizens of the state through the provision of better trained doctors to serve the several communities of the state through the provision of more nurses and more technicians to staff the many new hospitals of the state, and through an augmented research and postgraduate program;

THEREFORE BE IT RESOLVED, That the Nebraska State Medical Association respectfully direct the attention of the Governor and the Nebraska Legislature to the serious deficiencies of the medical school at the University of Nebraska, and

BE IT FURTHER RESOLVED, That the Nebraska State Medical Association make available to the Governor and the Nebraska Legislature, or any of its committees, all data and information obtained by its Medical Education Committee that will be of assistance in determining the needs of the medical school and medical centers, and

BE IT ALSO FURTHER RESOLVED, That the Nebraska Legislature be requested to specifically appropriate funds for the medical school.

"Mr. Speaker, I move the adoption of the resolution to the Legislature as amended."

The motion was seconded by Dr. R. E. Garlinghouse, and the motion carried.

Doctor Wycoff resumed the report of Reference Committee No. 1.

"The committee believes that the resolution presented by Doctor Morgan expresses the reaction of all the members of the association, and recommends its adoption:

"'WHEREAS, The Medical Education Committee of the Nebraska State Medical Association has studied the immediate problems facing the University of Nebraska College of Medicine, and

'WHEREAS, The committee has been impressed with the loyalty and devotion and untiring efforts of the faculty of the medical college since its inception in providing excellent teaching leadership in the face of inadequate facilities, clinical material, and financial shortage;

'THEREFORE BE IT RESOLVED, That the House of Delegates of the Nebraska State Medical Association, in special session assembled on January 11, 1953, give praise and commendation to the faculty for its service to the people of the state, its devotion to the young men and women studying medicine, and recognition of the sacrifices entailed in the carrying out of these voluntary obligations.'

"Mr. Speaker, I move the adoption of the resolution concerning the faculty of the University of Nebraska College of Medicine as presented by the Medical Education Committee."

The motion was seconded by Dr. W. Ray Hill and carried.

A motion was made by Doctor Wycoff that the report of Reference Committee No. 1 as a whole be adopted. The motion was seconded by Dr. R. D. Bryson and carried.

Doctor Bradley commended Doctor Wycoff and his committee for the excellent job they had done in expediting the work of Reference Committee No. 1.

The next order of business was the report of Reference Committee No. 2—Polio Coordinating Committee report and resolutions.

Dr. E. E. Koebbe, Chairman, submitted the following report:

"The committee endorses A and B (Resolution I) in its entirety.

"Under C we recommend that the words 'if and when set up' in line 6 be deleted, thus making the sentence read: 'Furthermore, that these centers be provided with adequate personnel and equipment to insure the best possible care of these patients, and that funds of such foundations as the National Foundation for Infantile Paralysis be utilized wherever possible.'

"It is recommended that the Board of Control be notified of our action.

"Mr. Speaker, I move the adoption of Section I of the report as corrected."

The motion was seconded by Dr. W. E. Johnson and carried.

"Resolution II—The committee endorses this resolution in its entirety.

"Mr. Speaker, I move the adoption of Section II."

The motion was seconded by Dr. J. B. Christensen and carried.

"Resolution III—The committee endorses and recommends paragraph A, with the addition that the state medical association request the State Crippled Children's Service to carry out this program.

"Mr. Speaker, I move the adoption of this report as amended."

The motion was seconded by Dr. J. B. Christensen and carried.

"Mr. Speaker, I make the motion that alternate plan B of Resolution III be rejected."

The motion was seconded by Dr. A. J. Offerman and carried.

"Resolutions IV and V—The committee recommends the adoption of these resolutions in their entirety.

"Mr. Speaker, I move the adoption of this section of the report."

The motion was seconded by Dr. J. B. Christensen and carried.

Doctor Koebbe resumed his report.

"Mr. Speaker, I move the adoption of the report as a whole of Reference Committee No. 2, as amended."

The motion was seconded by Dr. J. B. Christensen.

Discussion was called for and Dr. E. W. Hancock asked permission of the floor. He stated that the Crippled Children's Service appreciates the confidence the approval of this report gives them and that he was of the opinion it gives approval of the Crippled Children's Program.

The question was called for and the motion carried.

The chair complimented Doctor Koebbe and his committee for the splendid job done and thanked them for their report.

Doctor Bradley also expressed his appreciation to the House for the cooperation he had received during the special session, then stated that the special session, as called by President Morgan and the Board of Councilors, would stand adjourned.

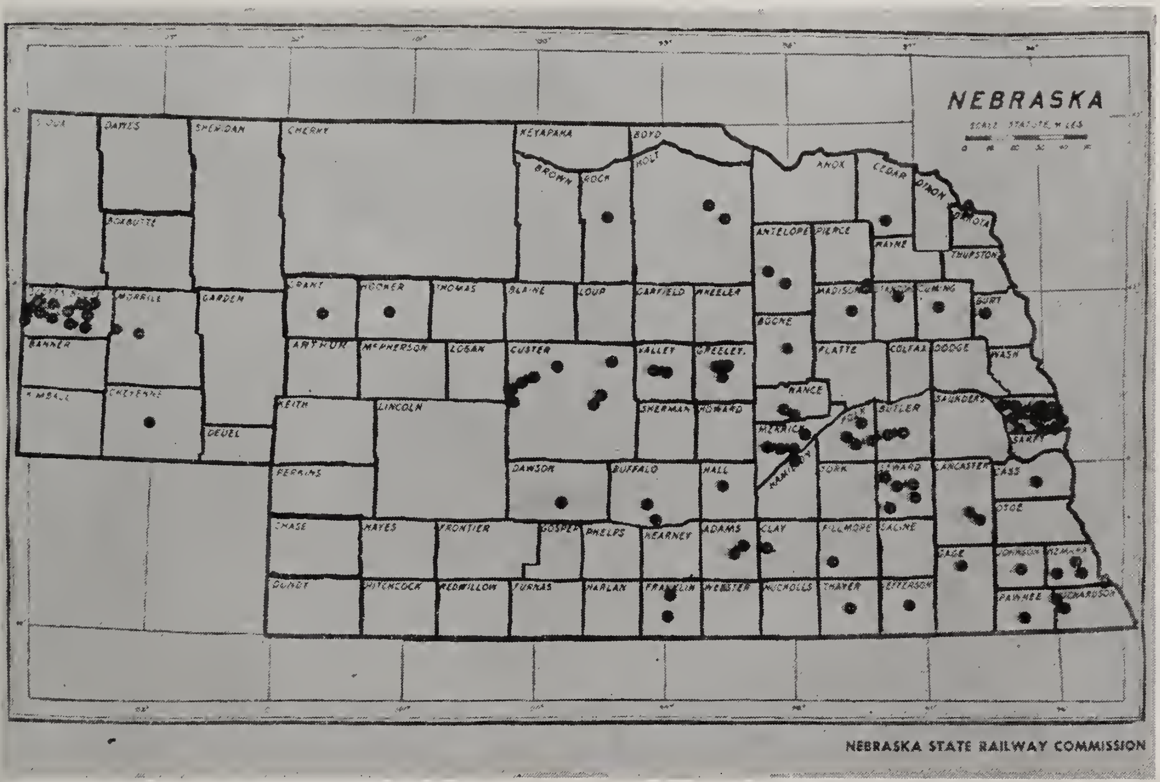
Nebraska State Department of Health

RABIES IN NEBRASKA

Recent increase in the incidence of animal rabies in the state merits consideration and an alertness on the part of practicing physicians, because of its resultant threat to the human population.

Animal rabies was fairly common in the state in the nineteen-twenties. From the early nineteen-thirties until recent years the incidence has been much lower. The one exception to this was an outbreak occurring in Omaha and vicinity in 1947. An upward trend was evidenced early in 1951, in several different sections of the state. This trend has continued. The map presented herewith shows the geographical distribution of laboratory proven cases of animal rabies during the past two years (1951 and 1952).

It is not intended to imply that the incidence shown by this map is total incidence. The submission of heads for laboratory examination has been encouraged only when a valid reason existed for the laboratory work. Conditions contributing to valid reasons for laboratory examination include human exposures, domestic animal exposures, and suspected rabies in wild animals. Certainly the few wild animals examined and found rabid cannot be considered an indication of the number of wild animals infected.



NEBRASKA STATE RAILWAY COMMISSION

Species of animals and numbers of each found rabid during the two year period are listed herewith.

TABLE I

Dogs	37
Cats	27
Skunks	24
Bovine	5
Squirrels	4
Raccons	2
Swine	1

The number of skunks attacking human beings or domestic animals, and found infected with rabies, is suggestive of the part wild predators and especially skunks may have in the epidemiology of rabies. It seems probable that in this state such wild life is the main reservoir of the virus, and that dogs and cats play a secondary role. While some of the human exposures caused by the rabid animals involved in this report were by wild animals, the majority were caused by cats and dogs. These domestic pets can be considered as bridging the gap between the rabies reservoir in wild life and the human.

The suppression of rabies in animals, both domestic and wild, can be achieved only by those owning, controlling or having contact with them. While all warm blooded animals are susceptible to rabies, for purpose of rabies prevention only the biting type need be considered. Stray and unneeded dogs and cats should be destroyed. The remainder should be immunized annually. This program of safeguards requires the cooperation of all. Many Nebraska communities have shown the effectiveness of this method of control.

Control of rabies, in wild animals is more difficult. These animals are not readily accessible. Farmers, ranchers, game wardens and others can do much, however, to reduce the population of wild animals which are vectors of rabies, which in this state includes the skunk, raccoon, coyote and fox.

In addition to the general part the physician may have in preventing rabies in animals, he has a special responsibility in the prevention of this disease in humans. Especially is it his responsibility to make decisions relative to anti-rabic treatment of exposed persons.

Knowledge of the rabietic or non-rabietic condition of the suspected animal is of primary importance. Suspected animals should be confined under safe conditions for observation, whenever possible. This should be for a period of fourteen days, and preferably by a veterinarian. Failure to permit the infected animal to progress to the terminal stage might result in negative laboratory (microscopic) findings. Laboratories ordinarily make animal inoculations of rabietic specimens found negative to microscopic examination. Results of animal inocu-

TABLE I
INDICATIONS FOR ANTI-RABIC TREATMENT

Nature of Exposure	Condition of Biting Animal		Decision as to Vaccine Treatment at Time of Possible Exposure	
	At Time of Exposure	During Observation Period	Endemic Area	Potentially Endemic Area
1. No lesion; indirect contact only, or licks of unabraded skin	Healthy or rabid	Healthy or rabid	None	None
2. Licks of mucosa, or abraded skin bites (other than face, or multiple bites, or bits of wild animals)	Healthy	Healthy	None	None
	Healthy	Rabid	Treat on diagnosis	Treat on diagnosis
	Suspicious*	Healthy	Treat, stop at 5 days**	None
	Suspicious*	Rabid	Treat	Treat on diagnosis
	Rabid	Rabid	Treat	Treat
3. Face bites, multiple bites, or bites of wild animals	Healthy	Healthy	Treat, stop at 5 days**	None
	Healthy	Rabid	Treat	Treat on diagnosis
	Suspicious*	Healthy	Treat, stop at 5 days**	Treat, stop at 5 days**
	Suspicious*	Rabid	Treat	Treat
	Rabid	Rabid	Treat	Treat
4. Bites by lost, strayed, killed, or or unknown animals	Healthy	Unknown	None, if local treatment within 1 hour by M.D.	None
	Unknown	Suspicious*	Treat, if no treatment by M.D., but rabies in area 30-60 days	

*Suspicious: in judgment of veterinarians.

**Stop at five days: if animal is observed by a veterinarian and he gives it a thorough physical examination including temperature, pulse, respiration, etc., and at the end of five-day period no clinical signs have appeared, treatment of bitten person should be stopped.

(Adapted from World Health Organization Technical Report Series No. 28, Nov. 1950)

lations are valuable in giving information as to the presence of rabies in an area, but the information is gained too late to be of value to the bitten individual.

Heads submitted for laboratory examination should reach the laboratory promptly or should be adequately refrigerated. Procuring hand handling of the head should be done in such a manner as to avoid injury to the brain. Best results are obtainable only when the laboratory is able to carefully select desired portions of the brain for miscroscopic examination. Local veterinarians ordinarily do a good job in handling rabid animals and submitting heads for examination.

The responsibility of administering antirabic treatment to humans and of making decisions relative to the advisability of its being administered is that of the physician. Fortunately, biological material currently available for antirabic treatment is such that undesirable reactions are quite rare. A survey of literature reveals that one case of vaccine encephalitis per 10,000 (?) individuals receiving antibiotic treatment is a representative estimate of the risk involved.

The World Health Organization has made recommendations relative to circumstances meriting antirabic treatment. These are summarized in the following tabulation.

Know Your Blue Shield Plan

FUNDAMENTAL REQUIREMENTS OF INSURANCE APPLIED TO VOLUNTARY MEDICAL CARE PLANS

Every physician should be familiar with the basic requirements of insurance which are necessary for the successful operation of a health care insurance plan.

These requirements have stood the test of time in other fields of insurance, and they serve as guideposts to the health care profession in their efforts to offer health care insurance.

Let us review the seven basic requirements of insurance, as set forth by Dr. Frank G. Dickinson, the American Medical Association's economist.

1. Laws of Mathematical Probability.
   How often a certain event will occur must be predictable.
2. Insurable Interest
   A person must stand to lose financially by occurrence of the event against which he wishes to be insured.
3. Large Number of Independent Risks
   There must be a large number of policyholders scattered over a wide area, to spread the risk.
4. Importance of the Risk
   The risk must be of sufficient importance to justify insurance against it. Health care meets this requirement.
5. Uncertainty of Occurrence
   It is unsound to insure against something that is certain to occur, and for this reason, health insurance should not attempt to cover minor, inexpensive illnesses which occur in all families.
6. The Insurance Itself Must Not Immeasurably Increase the Risk
   This is important when considering the advisability of providing certain health care benefits. If the possession of coverage for these benefits would make greater demands on the physician by those having the coverage than by those who do not have it, and if the increase cannot be predicted and measured, the risk cannot be insured.
7. The Risk Must Be Measurable
   This is the most important requirement of insurance. It means that it must be possible to determine in advance how frequently losses are likely to occur, and just how great these losses will be in the aggregate and for each risk. In health insurance, it must be known in advance just how much the total doctor bill for each thousand insured persons is likely to be. On this basis, the correct premium is determined.

All of these requirements may be summed up in the single statement defining insurability:

"In anything that is insurable at a profit, the penalty must exceed the benefit."

Deaths

Charles Pelikan, M.D. Doctor Pelikan died January 19, 1953, in Lincoln, Nebraska at the age of fifty-seven. He received his medical education at the University of Nebraska College of Medicine, and practiced in Overton before coming to Lincoln.

Hallie Ewing, M.D., Doctor Ewing died in Los Angeles, California, February 4, 1953. Dr. Ewing was formerly a physician at the State Hospital for a period of fifteen years prior to World War I. He later served as a physician for women at the Univeristy of Nebraska. In Los Angeles he was physician for several city high schools. He retired about fifteen years ago.

Gilbert D. Loffler, M.D. Doctor Loffler died at the age of eighty-four at his home at 540 South Cotner, Lincoln, Nebraska. Dr. Loffler moved from Glenwood, Iowa to Lincoln, Nebraska, twenty years ago and practiced here until failing health forced his retirement.

B. W. Hall, M.D. Doctor Hall and his wife were murdered at their home in Omaha, February 2, 1953. At the time of his tragic death Dr. Hall was seventy-six years of age. In addition to his long career as a practicing physician in Omaha, he was also a physician at a CC camp at Weeping Water, Nebraska in 1939 and at Winside, Nebraska, in 1940. Doctor and Mrs. Hall are survived by a son, Dr. Calvin H. Hall of Casper, Wyoming.

Ward Elliott, M.D. Doctor Elliott died December 3, 1952 at Durango, Colorado. He was a resident and practiced medicine at Newcastle from 1904 to 1912.

Frank Banks Slusser, M.D. Doctor Slusser died December 29, 1952 at the age of eighty-four years. He graduated from Medical College and practiced in several towns in the central and southern parts of the state before settling in Polk, Nebraska, in January, 1911. He practiced in this community until 1951 when he retired after 55 years of medical practice.

W. H. Calk, M.D. Doctor Calk, ninety-seven of 2136 Holdrege, Lincoln, Nebraska, a resident of Lincoln since 1925 died January 8, 1953. He died following hospitalization for a fractured femur sustained on Christmas day. A graduate of a medical school in Keokuk, Iowa, in 1881, Dr. Calk had practiced in several towns including Cairo, Reynolds and Lincoln. While he had not maintained an active practice for the past ten years he kept his license in force until about a year ago.

Edward Holman Skinner

It is with a deep sense of loss that we hear of the death of Dr. Edward Holman Skinner. Doctor Skinner was the leader and founder of the Kansas City Southwest Clinical Society in 1923. The Annual Fall Clinical Conferences of this organization have been attended by many of us and they have formed the pattern for other similar organizations.

Many of us know him particularly through his crisp, pointed editorials, particularly those dealing with what was, perhaps, his pet aversion — state medicine. He was, in the words of Vincent T. Williams, the present editor of the Kansas City Medical Journal, "writer, speaker, teacher, organizer, investigator, historian, and above all, a physician." It would be well if medicine had more of his kind.

Human Interest Tales

Comunications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. J. V. Carroll, North Platte, is now practicing in his new office.

Dr. and Mrs. G. E. Charlton, Norfolk, are vacationing in Florida.

Dr. L. H. Hoevet, Chadron, is the new President of the Chadron Sports Club.

Dr. H. O. Bell, York, has announced his retirement from active practice.

Dr. L. W. Forney, Crete, has returned from a one-month vacation in Mexico.

Dr. M. E. Markley, North Loup, is expected to be called into the service shortly.

Dr. Frank H. Sisler, Kearney, has reopened his office and is again in active practice.

Dr. Charles Tompkins, Omaha, recently conducted a three-day Family Life Clinic in Norfolk.

Dr. Payson Adams, Omaha, attended the South Central Section Urological Convention in Cleveland in December.

Dr. C. F. Ashby and Dr. V. S. Lynn, Geneva, have been elected to the Board of Directors of the Geneva General Hospital.

Dr. Elmer J. Artist, a University of Nebraska College of Medicine graduate, is now practicing in Greeley, Colorado.

Dr. Clayton Andrews, Lincoln, was chosen Senior Warden of the Church of the Holy Trinity in Lincoln on January 12.

Dr. Alan Zempel, University of Nebraska College of Medicine graduate, is now practicing with Dr. Roy S. Cram in Burwell.

Dr. William Berrick, formerly of Merlino, Colorado, has announced that he will establish his practice in Edgar, Nebraska.

Dr. B. W. Pyle, Gothenburg, was recently honored by friends during a ceremony marking his 25th year in medical practice.

Dr. Robert S. Wigton, Omaha, spoke before the Omaha chapter of the American Association of University Women, January 18.

Dr. Charles G. Muffly, formerly of Hay Springs, is now practicing with Dr. Clayton Buhl and J. T. Keown in Pender, Nebraska.

Dr. N. B. Bentley, Scotia, spoke to the local Woman's Club, January 13, on the topic of "Diseases Common to Children."

Drs. H. Winnett Orr, Fritz Teal, Howard E. Mitchell and Frank P. Stone, of Lincoln, are now occupying their new clinic building.

Citizens of Sutton, Nebraska, raised a polio fund in memory of the late Dr. L. D. Meese, who was a victim of the disease last summer.

Dr. Harold S. Morgan, Lincoln, attended a meeting of the A.M.A. Maternal and Child Health Committees in Los Angeles on January 22.

Dr. W. Ray Hill, Milford, announced the latter part of January that he will join in practice with Dr. J. T. Stanard, Seward, about March 1.

Dr. Charles Marsh, Valley, spoke to the Fremont Fire Department rescue squad on January 13 concerning the care of highway accident casualties.

Dr. Carl G. Amick, Loup City, attended a two-week refresher course at the University of Kansas Medical Center during the middle part of January.

Dr. Robert H. McIntire, who formerly practiced at Imperial before going into the Naval service, has been discharged and is now practicing in Hastings.

Dr. F. A. Hathaway, Lincoln, presented a paper before the Lincoln Health Club during the latter part of January on methods of controling heart disease.

Dr. J. D. Reid, Pilger, was honored by the congregation of the local Methodist Church on January 19 for his 50 years of service to the people of the community.

Dr. K. J. Kenney, has joined Dr. D. O. Hughes and R. L. Casel in practice at Fairbury. Doctor Kenney moved to Fairbury last summer from Kimball, Nebraska.

Dr. A. D. Brown, Central City, is the new President of the Merrick County Medical Society. Dr. Lee Holmes, Central City, has been elected Secretary-Treasurer.

Dr. Robert Fitzgibbons, Omaha, presents a paper on "Management of Varicose Veins" at a meeting of the Madison Six County Medical Society in Norfolk, February 5.

Dr. J. Perry Tollman, Dean of the University of Nebraska College of Medicine, discussed some of the school's problems before the Omaha Exchange Club on January 20.

Dr. R. Russell Best, Omaha, was a participant in a symposium on cancer at the recent two-day sectional meeting of the American College of Surgeons in Oklahoma City.

Dr. Harry M. Hepperlen, Beatrice, was recently named by the local city council as the new city physician. He succeeds Dr. Elmer Penner who leaves shortly for military service.

Dr. Charles Ingham, Norfolk, spoke to the Tilden, Nebraska, Gray Ladies Corps, January 28, on the care of the mentally ill. Doctor Ingham is superintendent of the Norfolk State Hospital.

Dr. Eugene Simmons, Omaha, spoke to the Tri-County Medical Society in Fremont, January 26, on "Recent Advances in Arthritic Therapy." Dr. Grant Reeder, Fremont, also discussed "Duke's Disease."

Dr. R. P. Carroll, Laurel, is the new President of the Five County Medical Society. Other officers elected are Dr. L. L. Maher, South Sioux City, Vice President, and Dr. D. O. Craig, Winside, Secretary-Treasurer.

Dr. W. Ray Hill, Milford, has been elected Chief of Staff of the Seward Memorial Hospital. Other officers are Dr. H. D. Clarke, Vice President, and Dr. John W. Posey, Secretary-Treasurer. Both are from Seward.

Dr. W. J. Arrasmith, Grand Island, is vacationing in California. Upon his return to Grand Island, he will be located in a new office. Dr. Arrasmith has announced that he is no longer associated with the Grand Island Clinic, which he helped to organize 30 years ago.

Dr. Andrew G. Dow, Omaha, has been chosen President of the medical staff of Children's Memorial Hospital. He succeeds Dr. Herman Jahr. Other new staff officers are Dr. George E. Robertson, Vice President; Dr. Byron B. Oberst, Secretary, and Dr. T. T. Smith, Treasurer, all of Omaha.

Dr. Guy R. Crook, Falls City, and Dr. Harlan S. Heim, Humboldt, were the featured speakers at a meeting of the Richardson County Medical Society in Falls City, January 22. Doctor Crook spoke on "Toxemia of Pregnancy." Doctor Heim presented a paper on "Random Thoughts About the Practice of Medicine."

Dr. J. Phil Redgwick, Omaha, has been re-elected president of the Clarkson Memorial Hospital staff. Other officers are Dr. George E. Robertson, Vice-President, and Dr. Willis D. Wright, Secretary-Treasurer. Dr. R. Russell Best and Dr. Edwin Davis, Sr., were elected to three-year terms on the Executive Committee. All are from Omaha.

Dr. A. J. Offerman, Omaha, was recentlly re-elected President of Nebraska Medical Service (Blue Shield). Dr. Donald B. Steenburg, Aurora, was also re-elected Vice President. Dr. George W. Covey, Lincoln, was elected to a three-year term on the Board of Directors. Dr. J. Jay Keegan, Omaha, and Dr. Paul S. Read, Omaha, were re-elected to the board.

DOCTOR . . . Please take each copy of your Journal home. The wives complain that they never get to read the Auxiliary column.

Tuberculosis Abstracts

THE PROBLEM OF TUBERCULOSIS CONTROL

Recent advances in the treatment of tuberculosis have raised for new consideration the question of proper balance among the producers now employed in control of this disease.

During the period from 1900 to 1925 there was a rapid advance in diagnosis due to improved roentgenological technics and bacteriological methods. Treatment, which, before 1925, had emphasized fresh air, proper food, and rest, acquired pneumothorax and collapse therapy. The second quarter century was one of accelerated development of case finding, hospitalization for purposes of isolation and care, a variety of measures for prevention, and finally social assistance for patients and their families.

This brings us to the opening of the third quarter. Optimists, watching the declining mortality from tuberculosis, predict its virtual eradication in the United States. Conservatives are concerned with the continuing high prevalence of known cases. In any event there is immediate urgency in coordiating and integrating the present measures. The decision as to the wisdom of a change or modification of our efforts will depend on our evaluation of the success of present measures of which a brief summary is presented for consideration.

Case Finding: There are three major methods of case finding today. The first is the discovery of cases by physicians engaged in private practice. Private practitioners are the ones most likely to have first knowledge of cases that have progressed to actual symptoms. The second is search for cases on a contact basis. This is essentially clinic practice and rests on the principle that one case of the disease comes from another. The third, mass roentgenographic surveys of large segments of the population, is organization on the sound theory that a large enough relatively inexpensive net will gather in most of the unknown cases.

Medical Treatment: Medical treatment has passed through the stages of primary emphasis on hygenic care, collapse therapy, surgical measures, and drug treatment, to the present period of a combination of chemotherapy and surgical practice, and effective rehabilitation. The cardinal requirement is the hospital bed for tuberculosis, and it is indeed the crux of present day problems.

Prevention: Proper treatment is itself a large part of prevention because it removes sources of contagion from susceptible persons. In the best organized communities today, hospital treatment of the patient is supplemented by supervision and education of family at home. To this is added in small segments of our population, BCG vaccination.

Social Assistance: This varies all the way from abolition of the means test as a requirement for hospital admission to direct financial grants to a patient's family during the period of non-employment of the patient. All social assistance programs include rehabilitation of hospital patients. Experience has shown that the patients' morale and faithfulness in taking treatment depend in large on the support given his family in his absence.

Mortality: Tuberculosis mortality in the United States declined 90 per cent from 1900 to 1950. The mortality in 1950 was only half that of 1945. Tenative figures indicate that the death rate for 1951 was 20 per 100,000 population. A breakdown by race, sex, and age shows that the mortality rate in non-white persons is about three times that in white persons, and that more than half of all deaths from tuberculosis now occur after the age of 45 years. The greatest number of deaths from tuberculosis today occurs in old white males.

Prevalence: It is agreed that the known prevalence of the disease has declined little in the last 20 years. Failure to decline is due, in part, to improved case-finding procedures and increased longevity of patients. The total number of cases of active disease in the United States is 400,000, approximately 250,000 of which are known to health departments.

Incidence: The average annual incidence of new cases reported in the whole country has been about 120,000 in recent years. The figure was 118,000 in 1951, a drop of 19,000 cases from the 137,000 in 1948. This drop is probably significant.

Hospitalization: Hospitalization is recognized as the core of tuberculosis control. Until recently the minimum number of beds required for adequate control was judged to be two and a half times the number of deaths from tuberculosis annually in the community. Three beds per annual death were recommended. Many communities are still far from meeting the minimum standard but some substanially exceed it. At present in the United States approximately 102,000 beds are set aside specifically for tuberculosis. The standards in the future may be based on known prevalence rather than deaths.

Cost of Tuberculosis Program: The annual total cost of tuberculosis control in the United States is calculated as $350,000,000, exclusive of construction expense and the cost of training personnel. This includes the sums spent on hospitalization, which is figured at $200,000,000 a year, or more than half the cost of the whole tuberculosis program. Finally, we may note that the average cost of one case of tuberculosis is about $15,000.

With this background, what is the best plan for tuberculosis control in the future? Two courses are obviously open, viz., (1) to keep on as we are doing, improving procedures whenever possible, and (2) to revise the program by introduction of some new principle. We may rest reasonably well assured that in time the first of these procedures will relegate tuberculosis to a minor position among diseases, though only at great cost. It will mean a steady increase in measures for case finding, more hospital beds and larger sums for rehabilitation. If inflation continues, the dollar cost will be magnified. Even so, the price might be small in comparison with allowing tuberculosis to persist in our population.

A better course cannot be outlined now, but some elements of the program merit careful scrutiny. The hospital program costs $200,000,000 and this will probably be increased. The internist may inquire if full advantage is being taken of the powerful force of private practice in supplementing hospital care. Hospitalization in effect does not provide for all the tuberculous patients in need of care and many hospitals have waiting lists. The latest and best methods of surgery and chemotherapy have not shortened but frequently have lengthened the optimum period of hospital stay.

Herein, however, lies one possible change in which the private practitioner is concerned. After completion of the necessary active therapy and the accompanying indoctrination in personal care, could not the time-consuming final steps in the cure, particularly the essential long continued chemotherapy, be carried out at home, with safety and success, by private physicians?

This suggestion may have merit. Much depends on improved understanding of tuberculosis by physicians in general practice and on the character of the homes in which treatment is given. Tuberculosis is most prevalent today in the economically underprivileged. The problem is not purely medical, but is inextricably bound up with social issues. There is reason to hope that the standard of living will continue to rise. In the meantime, more intelligent application of the skills of practicing internists may solve part of the problem. Competent home aftercare of tuberculous patients who have had a satisfactory course of institutional treatment, is one possible way of saving hospital time and relieving bed shortages.

—By Esmond R. Long, M.D., Annals of Internal Medicine, November, 1952.

THE KEY TO THE HEART PROBLEM

Medical research is the key to the heart problem. That is why today the medical profession and the public are backing the greatest effort in history to find the basic causes of diseases of the heart and circulation which are responsible for more deaths than all other diseases combined.

Through research, we have made tremendous advances in the care, treatment and prevention of heart disease. We have developed new drugs which can prevent recurrences of rheumatic fever — forerunner of rheumatic heart disease. We have created drugs which slow blood clotting and reduce fatalities following heart attacks, drugs which aid in the treatment of high blood pressure, and other circulatory ills.

We have accomplished miracles in heart surgery and perfected remarkable new instruments which help us diagnose and study heart diseases. We have devised new techniques for operations on the heart which are certainly among the wonders of modern surgery, bringing new life to suffering victims.

We have learned, in little more than two decades, that much can be done for heart disease. We know that a great many heart patients can be rehabilitated to lead happy, useful, productive lives. And we are convinced that these advances can lead to even greater achievements, to new knowledge that will save lives, alleviate suffering, and improve the nation's health.

The progress made by medical science has been truly astonishing. But we are still coping with the problem of discovering the causes of the three diseases which account for 90 per cent of all heart diseases — rheumatic fever, high blood pressure, and hardening of the coronary arteries.

Research is what has brought us this far in the fight, and continued, more intensified research is what will take us still further. Hope for millions of hearts — and yes, millions of lives — lies primarily in the laboratories whose scientists are devoting their lives with a strong determination to conquer the unknown. These are the men and women whom the American Heart Association asks you to help.

In the last four years, the American Heart Association has devoted four million dollars to laboratory research. It has been money well spent, and there must be more for this purpose. There must be funds, too, for the significant phases of your Heart Association's program.

The fruits of research must be shared by the medical profession as a whole, and by the public — heart patients, their families, teachers and the community agencies concerned with their welfare. Research information must be transmitted to physicians throughout the nation. The public must be educated so that fear will be eliminated, harmful misconceptions prevented. People must be told they can protect their hearts. That is the task of the American Heart Association's education program.

But the Association does not stop at research or education. It is interested, too, in those millions of Americans who have heart disease, and through its community service program, it provides the means to retrain and rehabilitate them and fit them once again for a gainful place in their homes, their schools, their careers.

It is through the annual HEART FUND that the wherewithal is provided for the work of the American Heart Association and its affiliates, and there is a lot of work to be done: ten million Americans suffer from heart disease; the annual death toll is three-quarters of a million. This year the fund posters are worded very simply and very directly: "Help Your HEART FUND — Help Your Heart." We all have seen the ravages of heart disease. We know many of its victims. We must take these words to heart.

IRVING S. WRIGHT, M.D.,
President, American Heart Association.

MILESTONES IN HEART RESEARCH

It was about a hundred years ago that a French physician, Rene-Theophile-Hyacinthe Laennec, held a tightly rolled cylinder of paper to a patient's chest. He found that he could hear the heart beat far more clearly than with his ear alone.

Laennec's experiment led to the invention of the stethoscope, one of the greatest aids to the diagnosis of heart conditions.

Today's physician — thanks to modern heart research — has many precise instruments for diagnosing heart disease.

Progress depends on research. And research depends on dollars. So why not strike a blow at heart disease now with a generous gift to the Heart Fund.

The Nebraska State Medical Journal

ESTABLISHED 1916 BY THE NEBRASKA STATE MEDICAL ASSOCIATION

Vol. 38 Norfolk, Nebraska, April, 1953 No. 4

EDITORIAL

"CONSISTENCY, THOU ART A JEWEL"

Consistency in word and action is a great virtue and one which would become doctors as well as others in less conspicuous positions in the public view.

The American Medical Association has been engaged in fending off state medicine and in trying to retrieve those segments of the practice of medicine which have been alienated from the practitioner by government agencies, without just cause.

As noted in a recent editorial in this Journal, a committee appointed by the American Medical Association spent a year assessing the activities of the Veterans Administration with special reference to the care of non-service-connected illness in its hospitals. The result of this careful study strongly supports the thesis that a great many ex-service people are cared for in these installations who should rightfully be attended by their home doctors.

Discussion of state medicine amongst civilian physicians almost always leads to declarations of nearly unanimous opinion that the veterans hospitals are unjustly invading the field of the civilian practitioner and of strong aversion to this government activity. The criticism extends beyond the system, to all those physicians who take any part in the work of the veterans hospitals. It has been stated by prominent physicians by word and pen that as many as ninety per cent of patients in veterans hospitals are non-service-connected. Some of these statements have led to rancorous answers by Admiral Boone and others closely connected or in sympathy with the Veterans Administration.

In actual practice, however, many civilian doctors seem to give the lie to their words and to the activities of the American Medical Association in their behalf. The writer knows beyond a doubt of many instances which seem to prove the above statement. Not a few private practitioners bombard the admitting officers of some of our veterans hospitals with requests for admission of their private patients. Furthermore, if immediate admission is not granted they sometimes falsely declare the condition of the patient to be such that an emergency exists. They are aware that the rules demand that a patient whose illness constitutes an emergency must be admitted at once.

When a non-service-connected case comes in as an emergency and is found to be non-emergent, a record of complete history and physical examination must be on file before he can be sent back to his home to await his proper turn to be admitted to a veterans hospital. This takes an average of ninety minutes of the doctor's time. In one veterans hospital that the writer knows about, one-half to two-thirds of the "emergency" cases in some categories that are sent for admission are examined and sent out without being admitted, because they are found to be not emergencies.

During a two-hour period while the writer was working at this hospital recently, two civilian practitioners telephoned in an attempt to get "emergencies" admitted. Neither case proved to merit this classification and admission was refused. During the previous forty-eight hours there had been twenty-four calls by telephone to the admitting doctor about patients seeking admission. All excepting two of these patients were non-service-connected. Of the twenty-four calls, twelve were from civilian doctors. At least ten of these doctors must have been trying to have non-service-connected veterans admitted.

One of these physicians told the admitting officer that his patient was paralyzed from the waist down and wanted an ambulance sent to bring him in. An effort was made to comply but muddy roads prevented reaching him. The following day a private ambulance brought the man to the veterans hospital. (The VA pays for this ambulance service). It was found that this man had no paralysis. A painful, acute, low back-condition made it difficult for him to walk.

It is very perplexing for the writer to try to reconcile what he hears the private physician SAY about treatment of non-service-connected cases in veterans hospitals with what he sees the same physician DO about this menace to private practice. Consistency, thou wouldst be a jewel.

THE CEREBRAL PALSY UNIT

The care of the child who suffers from cerebral palsy seems just as important as that of any other crippled child, and a great deal can be accomplished toward the rehabilitation of these unfortunate people.

In Nebraska we have been fortunate enough to get a special appropriation of funds for the purpose of specialized care of cerebral palsy-cases. Whether the amount of this fund is sufficient for the purpose may be open to question, but it certainly should be a good start in the right direction.

There is ample space and general equipment at the Orthopedic Hospital to accomodate a unit for the specialized care of these cases. Whether special equipment is ample may be questioned, but other funds are apparently available to supplement what the Legislature appropriated. One source of such funds is the Nebraska Society for Crippled Children who guaranteed money up to $5,000 for braces for these children.

Personnel for the general care of these patients is available and specially trained people have been hired to care for the cerebral palsy-cases. Doctors are available and greatly interested in the medical and surgical services needed by these children. Moreover, a sufficient number of them are experienced in the care of cerebral palsy, so that the project should be successful.

To summarize, we have money, the space, the trained personnel, a high degree of interest in doing the job and the machinery all set up to accomplish a needed service to an unfortunate group of sick people. We also have the assurance that this service could go far to make these unfortunates not only happier with their state in life, but, in some cases, self-supporting and self-confident.

According to a report of the Cerebral Palsy Committee of the State Medical Association, held on October 10, 1952, the work of the unit is failing. The reasons assigned for this failure are set out in a resolution which is too long to be used in full, but the following is extracted from it: "This failure has to a large extent been due to a lack of cooperation on the part of the administrative personnel of the Orthopedic Hospital in carrying out the directives of the Board of Control . . ." "The attitude of the personnel of the Orthopedic Hospital has been completely unfriendly toward the patients of the Cerebral Palsy Unit . . ." "This unfriendly attitude has frustrated the efforts of the therapists in the unit . . ." etc.

All that seems to have been necessary in order to make a success of a much needed service is friendly cooperation between the Board of Control, the administrative personnel of the Orthopedic Hospital, and the Cerebral Palsy Unit.

The whole group of services mentioned above are assumed to be under the jurisdiction of the Board of Control of the State of Nebraska. The State Medical Association and its committee on cerebral palsy are solidly behind this project and very anxious to see it succeed. Wherein, then, lies the difficulty? Doesn't the Board of Control have "control" of its institutions and of those who constitute the "administrative personnel?"

Proceedings of the Convention for the Organization of the Nebraska State Medical Society. Held in Omaha, Nebraska, June 24, 1868—

"Case 5. Reported by R. C. Moore of Omaha. William Thompson, an employee of the Union Pacific Rail Road Company, was scalped by the Cheyennes, near Plum Creek Station, Nebraska, on the night of the 6th of August, 1867. He was placed under my care on the morning of the 8th, about thirty-six hours after the wounds were inflicted." (History of Medicine in Nebraska, Orr, 1952).

"The Otoe County Medical League was organized August 9, 1899, with a very good membership. Dr. Claude Watson, of Nebraska City, was elected president and Dr. J. A. Haggard, of Nebraska City, secretary . . ." (History of Medicine in Nebraska, Orr, 1952).

Trichlorethylene in Obstetrics

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The authors report the use of trichlorethylene as an anesthetic agent in 154 obstetrical patients during delivery. Important details relating to methods, combinations with other anesthetic agents, potential dangers, limitations of usefulness, etc., are pointed out. Finally, the results as related to mother and baby are tabulated and analysed.

EDITOR

Trichlorethylene (TCE) as an anesthetic agent in the field of obstetrics has received renewed attention of late by reason, perhaps, of refinements in the method of administration. Mild curiosity excited by the advent of two new pieces of apparatus designed for the self-administration of the drug in the late first stage of labor, or by an anesthetist during the second stage, led us to study the history of TCE, its physical and chemical properties, and later because of a heightened interest we used the preparation in a series of 154 deliveries.

In this clinical trial we attempted to answer to our own satisfaction certain questions that had arisen during our preliminary conversations about the drug. It is the purpose of this communication to present pertinent information concerning this agent, methods of administration, and our opinions regarding its use in the field of obstetrics.

PROPERTIES

Trichloreythlene (TCE) is a substance whose pain-relieving property has been recognized for many years and utilized since the first world war. One of its earliest applications was for the pain of trigeminal neuralgia, for which it was considered to be specific. The connection was subsequently denied, when it was supposed that the neuralgia was being controlled by an analgesia obtainable from other sources, but the affinity for this nerve has appeared again in its incompatibility with sodalime. It is a liquid with an odor similar to chloroform, to which it is chemically related. Trichlorethylene, $C\,H\,Cl : C\,Cl_2$ is related to ethylene, $C\,H_2 : C\,H_2$, and to ethane, $C\,H_3 : C\,H_3$. Chloroform, $C\,H\,Cl_3$, is associated with methane, $C\,H_4$, there being no possible unsaturated intermediate compound. It is insoluble in water, but is miscible with chloroform and ether. Its molecular weight is 132.5; it is noninflammable in air (but can be ignited in oxygen at high temperatures); its specific gravity is 1.47 and its vapor density is 4.53 (air equals 1); its boiling point is 87°C. It is slightly unstable when exposed to sunlight and air, forming dichloracetyl chloride, carbon monoxide, phosgene, and hydrochloric acid. In the presence of the cautery, it liberates chlorine. When passed over hot sodalime, it produces dichloracetylene, which paralyzes cranial nerves. It is kept in air-tight dark bottles; it contains 0.01 per cent thymol and it is colored with waxolene blue to distinguish it from chloroform.

Because of its high boiling point it cannot be successfully vaporized by the open drop method; while due to the danger attending its reaction with sodalime, it may not be administered by the closed system. It must therefore be given by drawing air through a saturated wick or by passing a mixture of nitrous oxide and oxygen through the liquid while a valve maintains a flow of the gases in a single direction. It has been employed chiefly to obtain analgesia or pain relief without unconsciousness, but mild surgical anesthesia has been obtained; its concentration here is only one per cent, again suggestive of chloroform. It is eliminated mostly through the lungs, but small quantities are liberated in the urine as trichloracetic acid.

Eye signs are unreliable, but they are equally so for anything but ether, and there are other indications of increasing depth of anesthesia; these are chiefly tachypnea, bradycardia, and finally extrasystoles; salivation may occur. A toxic effect on pulse or respiration is an immediate indication for stopping or lowering the concentration of the drug. TCE and epinephrine are probably incompatible. There is little or no excitement and no change in blood pressure. Neither liver nor kidney appear to be affected by TCE. There is a very small incidence of vomiting, and headache may appear. Relaxation of muscles is not obtainable by the use of TCE.

TCE was formerly called Trethylene and Gemalgene; it is now known commercially as Trilene or Trimar.

TECHNIQUE OF ADMINISTRATION

In the usual inhaler, 15 cubic centimeters of TCE are poured in at the start and the excess should be removed when the case is finished. A 6 cubic centimeter ampule is inserted into a somewhat smaller model that has recently come to our attention. At a cost of slightly over one cent per cubic centimeter, TCE ranks as one of the most economical anesthetic agents.

It has been possible to conduct intermittant analgesia for several hours with the hand mask inhaler without harm to mother or child. Analgesia is best started in primiparae during the latter part of the first stage by self-administration throughout each contraction. Previously the patient may have received Demerol in 50 or 100 mg. doses without compromising the use of TCE. In multiparae, analgesia is generally started at four cm. dilatation and when contractions are coming at intervals of six minutes or less. During these phases of administration, the dial on the apparatus is set at about the halfway mark and locked in position. During the second stage of labor the dial is advanced slightly by the anesthetist, and the patient, after taking three or four breaths, is urged to bear down.

Prior to the delivery of the baby, the anesthetist gives continuous inhalation until what corresponds to first plane anesthesia obtains. Until this period, best results are secured if the obstetrician will refrain from any examination of the patient. To touch her at this time will increase the excitement stage.

CLINICAL DATA

TCE was used as an analgesic and anesthetic agent in 140 multiparae and 14 primiparae, or a total of 154 patients. No maternal deaths occurred nor did any the babies born to these mothers show signs of respiratory depression or difficulty.

Ninety-five episiotomies and repairs were included in the series; all were done with the mask inhaler, with no need to change to another anesthetic agent in order to complete the repair. This amounts to an incidence of 61.7 per cent which does not differ statistically from accepted average figures.

FORCEPS

In an attempt to evaluate TCE as it relates to muscle tone, i.e., relaxation of perineal musculature, we employed the inhaler in sixty forceps deliveries, one of which was a Piper forceps application on an after-coming head and one was a low mid-forceps application. It will be noted at once that this is a high incidence of forceps delivery, but for the sake of evaluation of this anesthetic the incidence is justifiable. As had been noted by others, muscle tone is not appreciably affected by TCE and we do not consider it an anesthetic of choice wherein delivery is estimated to fall in the categories of moderately difficult through difficult, nor in any patient whose delivery will be facilitated by complete relaxation of the muscles of the pelvic floor, i.e., breech delivery.

Five sets of twins are included in this series. In this circumstance temporary anesthesia is often desired to avoid narcotization of the second baby. TCE may be well adapted to this situation, but we would prefer to withhold definite recommendations until a greater experience permits us to speak authoritatively.

Nausea and vomiting were encountered in only two cases, an incidence of 1.3 per cent, contrasting favorably with the generally accepted incidence of 15 to 20 per cent for postpartum nausea and vomiting with other inhalation anesthetics.

As was pointed out above, no depression of the baby was noted in any instance and respirations were established in shorter time in all cases than has been our experience with other types of analgesia and inhalation anesthesia.

Temporary cardiac arrhythmia was noted in ten cases but normal rhythm always followed immediately when the anesthetic was discontinued. Since completing the study of the series one serious arrythmia has been recorded, the details of which are included in this report.

This patient received TCE intermittently for five minutes, then continuously for about two minutes. She delivered a baby that cried early and spontaneously, and soon afterward she suddenly became ashen gray, limp, and apparently pulseless. She continued to breathe without interruption. The anesthetist immediately gave her oxygen with the anesthesia machine. The oxygen was continued for about five minutes. Nitrous oxide and oxygen were then given in a 3 to 1 ratio, with the escape valve open, for not more than three minutes, as some kind of anesthesia was required. Then more oxygen was administered for about four minutes, and the patient was returned to her room. Her recovery was immediate. It is not known, due to the excitement attending the suddenness and seriousness of the untoward event, whether or not the sodalime canister was turned out of the circuit while she was breathing into and from the anesthesia machine. She was completely awake and had a systolic blood pressure of 112 on return to her room. She seemed perfectly normal when seen the next day. There was no facial weakness or numbness and no difficulty in swallowing at any time.

One diagnostic dilatation and curettage and one radium insertion for malignancy of the cervix were also carried out using TCE as the anesthetic agent. Here again we are not enthusiastic but further use may modify this opinion.

TABLE I

	No. of Patients	Percentile Incidence
Obstetrical patients	154	
Multiparas	140	
Primiparas	14	
Maternal mortality	0	
Forceps deliveries	60	39
Piper forceps	1	
Mid-forceps	1	
Low forceps	58	
Episiotomy and repair	95	61.7
Postpartum nausea and vomiting	2	1.3
Twin deliveries	5	
Depressed babies	0	
Additional anesthetic required	3	1.93
Dilatation and curettage	1	
Radium insertion	1	

DISCUSSION

Three questions may be asked concerning the place of TCE in obstetrical anesthesia:

First, what advantages does it offer in comparison with other agents, particularly cyclopropane? Less equipment is required, but there should be facilities for inflating the lungs by pressure and for suctioning the pharynx. Where analgesia only is wanted, it theoretically can be offered by less skilled personnel. During the first stage, a considerable amount of psychological support is secured from the hand mask, usually strapped to the patient's wrist; this technique can be applied to other agents. TCE is generally nonexplosive. It does not appear to affect maternal uterine contractions, nor, while it passes the placental barrier, does it commonly affect the fetus. In other hands, resuscitation of the infant has been necessary in one per cent of the babies delivered during its administration; cardiovascular disturbances have not been reported in the baby. Anesthesia induction and emergence are rapid. A desirable retrograde amnesia, characteristic of analgesic techniques, follows its use.

Second, when it has become impossible to produce adequate anesthesia with TCE, what technique may be used, and particularly, how soon may the patient be included in a closed anesthesia system, since it has been shown that dangerous cranial nerve palsies results from its reaction with sodalime? The answer to this is threefold. While it is our theme that more can be done with TCE than is generally supposed, it should only be started in cases for which it obviously will suffice, and never where there is a question of its efficacy because of the severity of the condition. Second, a change can always be made to open drop ether. Third, opinions of others who have become expert in its use have suggested safe waiting periods of 2 to 3 minutes, 5 minutes, and 15 minutes. In view of the paucity of statistical supporting figures and of the severity of the cranial nerve injuries that may ensue, we have estimated a safe waiting period of 25 minutes. We have done this in two cases without complications.

Third, must TCE be limited to simple deliveries, or can it be used for the majority of obstetrical cases? Forceps deliveries, and episiotomies and repairs, as has been indicated above, can be done under TCE anesthesia.

SUMMARY AND CONCLUSIONS

1. TCE was used in 154 vaginal deliveries divided into 140 multiparae and 14 primiparae.

2. Episiotomy and repair were done in 95 cases. No difficulties were noted as being due to poor anesthesia.

3. Forceps were used in 60 cases, some liberalization in the indications in such procedures being entertained because of the clinical trial of TCE.

4. Postpartum nausea and vomiting were rare.

5. Relaxation of perineal structures was not good.

6. Retrograde amnesia followed in practically all patients. For this reason TCE has found ready patient acceptance.

7. The possibility of using TCE in twin deliveries is discussed.

8. Few side effects were encountered.

9. It was the impression of several observers that labor was shortened because of the psychological support offered by the hand mask.

10. No depressed babies were seen in the entire series.

11. Supplementary anesthesia was required in only 1.93 per cent of these cases.

12. More can be accomplished with TCE than is generally thought possible. General anesthesia is obtainable with the agent, and

forceps applications, and episiotomies and repairs can be effected.

Since this study was made of the patients represented in Table I, we have used TCE in an additional 18 cases, making a total of 174 administrations. There have been no untoward results in these additional cases and our opinion of TCE has not been altered by them.

Evaluation of C.C.K.-179 (Hydergine)* In The Therapy of Hypertension

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The authors review, briefly, the known facts and theories relating to the cause and treatment of arterial hypertension. They stress the unsatisfactory results of various methods of therapy that have been in use heretofore. They dwell at some length on the development and pharmacologic actions of the hydrogenated derivatives of the crude extract of ergot and then present the results of the use of one of them, Hydergine, in a series of cases of hypertension.

EDITOR

A review of the therapy of hypertension reveals an enormous number of proposed therapeutic measures(1, 2). Due to the increasing interest in cardiovascular disease and in view of expanded research facilities, many workers are devoting their energies to solving the difficulty that hypertension presents to the physiologist, the pathologist and the clinician(3).

The etiologic factors of hypertension in its most common clinical form are dimly understood(4, 5, 6). It has been pointed out that the essential problem in hypertension is arteriolar disease. Practically all of the therapeutic measures which have been proposed assume that the degenerative process in the arterioles is due to the hypertension. In spite of all that has been said about this blood pressure-arteriolar disease relationship, its true nature is still unknown. It has never been shown that permanently lowering blood pressure by sympathectomy or any other means definitely reduces the morbidity of vascular disease and its attendant complications. However, such an assumption seems quite reasonable. In its present state of development the therapy of hypertension is directed primarily at lowering the blood pressure.

The role of certain humoral substances and of the sympathetic nervous system in the genesis of hypertension has received considerable attention. Goldblatt's discovery and elucidation of the renin-angiotonin mechanism stimulated a great deal of interest in the part that humoral factors play in high blood pressure(7). So far little clinical application of the principles he demonstrated has been possible. Hypertension due to a Goldblatt kidney occurring in the course of primary renal disease was recognized and nephrectomy was proven to be a definite means of relieving the hypertension. It was soon found that the Goldblatt kidney is a rare pathologic entity so the number of hypertensive subjects helped by this procedure has been very small. It is now known that the average hypertensive patient has little in common with the animals prepared by Goldblatt(8). While doing little to solve the immediate problem, this work stimulated the thinking of many other investigators. Ephram Shorr demonstated the very interesting substances, VDM (vasodepressor material) and VEM (vasoexcitor material), which so far remain only tools of the experimental physiologist. Several others have described similar substances(9). While these avenues of study may ultimately do most to solve the problem, those closer to the hypertensive patient have found more promising approaches in other directions, namely measures directed at well worked out physiologic systems, the sympathetic nervous system and the adrenal medulla.

The physiologic action of the sympathetic nervous system and the adrenal medulla are well documented(10). The importance of these anatomic units in the maintenance of blood pressure suggested the study of these organs for the possible site of the lesion causing hypertension. Rather favorable results following surgical attack on the sympathetic nervous system in some hypertensive subjects has further served to focus attention at this point(11, 12, 13). The success of the surgical approach to the problem has stimulated interest in sympathicolytic and adrenolytic agents which might be used to produce a similar effect through medical means.

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*Supplied through the courtesy of Sandoz Pharmaceutical Company.

There are many drugs with adrenolytic or sympathicolytic properties(14) or both which, because of toxic reactions, are not clinically useful. None of these drugs will be discussed here.

Rothlin(15) and many others have shown that hydrogenation of certain alkaloids of ergot produces agents which show the desired sympathicolytic and adrenolytic actions without all the disadvantages associated with other like-acting substances. It is the purpose of this report to describe the results obtained with certain of these compounds used on a series of hypertensive patients. Before reporting the experimental findings of this study it would be well to consider in some detail the pharmacology of the hydrogenated ergot alkaloids.

PHARMACOLOGY

Dale(16) originally described the action of the crude extract of ergot and its first available refinement, ergotoxine. Three additional alkaloids were isolated from ergotoxine by Stoll and Hoffman in 1943(17a). These were ergocristine, ergokryptine, and ergocornine. These have a direct stimulating effect on smooth muscle plus a sympathicolytic and adrenolytic effect.

In 1943 (17b)Stoll and Hoffman made the important discovery that hydrogenating the readily reducible double bond of the lyseric acid radicle of these alkaloids gave rise to products which differed quite sharply from their parent substances. The hydrogenated derivatives were found to be less toxic and less emetic than the original alkaloids. The sympathicolytic action was found to be accentuated and the direct action on smooth muscle abolished or definitely reduced. These substances are non-oxytoxic.

Three distinct actions, sympathicolysis, adrenolysis, and vagal stimulation were demonstrated clinically by Freis(18) to occur with the use of hydrogenated ergocornine, ergocristine, and ergokryptine. The cold pressor response was shown to diminish as did reponse to noxious digital stimulation which are known reflex functions of the sympathetic nervous system. The compounds were found capable of inhibiting epinephrine induced hyperglycemia and blood pressure elevation. A bradycardia was found which could be abolished by atropine, thus establishing the vagal basis for this cardiac effect.

Hydrogenated ergocornine, ergocristine, and ergokryptine are drugs which might be expected to produce the long sought "medical sympathectomy." The side reactions and toxicity of these compounds has been shown by our study and many others to be minimal and in no way to interfere with their use in the treatment of hypertension.

METHODS AND MATERIAL

A series of eleven hypertensive patients was studied for periods ranging from three to twelve weeks. Ten of these patients had a diagnosis of essential hypertension established for at least two years. The usual diagnostic criteria were present in these cases, i.e., sustained blood pressure readings above 140/90 and absence of any other demonstrable disease known to cause elevation of the blood pressure. The other case studied was that of a patient with malignant hypertension which was rapidly progressive. In the essential group all but one (M.W.) were fully compensated and only one had evidence of impaired renal concentrating power which had appeared several years after the onset of the hypertension (I.W.). These patients were selected at random from the hypertensive subjects coming to the cardiac clinic of the Creighton Medical School Dispensary. Each of those in the essential group had had unsuccessful therapy with phenobarbital and thiocyanate. Three (M.P., L.S., and I.W.) had received veratrim veride without improvement.

The Sandoz company supplied sterile ampuls of "CCK 179" (Hydergine) each of which contained, in 1.0 cubic centimeter of water, 0.1 milligram each of dihydroergocornine, dihydroergocristine, and dihydroergokryptine.

The experimental routine was as follows. The patient reclined for three minutes and then three consecutive blood pressure determinations were made in the usual manner. The mean of these determinations was taken as the basal pressure for that day. When the daily basal blood pressure had been determined the patient was given an intravenous injection of "CCK 179." Each patient was started with an injection of 0.5 cubic centimeter. Every patient was observed continuously for one hour following the injection with pulse and blood pressure determination at ten minute intervals. This was done for two reasons. We wanted to record the immediate reaction of each patient to the drugs and also we were watching for signs of acute toxicity. On subsequent injections the period of observation was gradually shortened as it became apparent that the patient did not possess any abnormal sensitivity to the drug. The second injection in each case was increased to 2.0 and 3.0 cubic centimeters. An effort was made in each case to give the drug six days out of seven for the first seven to ten days of therapy. Gradually the interval between injections was increased up to three to four days. Whenever the blood pressure obtained at a given visit exceeded that of a previous visit the interval between injections was shortened until this trend stopped. Because our series consisted entirely of out-patients, it was not possible to maintain an extremely rigid schedule for administering the injections.

RESULTS

Despite the smallness of our series a definite favorable change in the blood pressure was observed in all but one patient (M.P.) with essential hypertension. The case of malignant hypertension responded poorly to the injections and the ultimate prognosis was unaltered. The patient died shortly after the drug had been discontinued.

Side reactions, even on relatively high dosage levels, were surprisingly few. Practically every patient noticed a feeling of warmth about the face immediately after the first dose of the drugs. This sensation was not excessive in any case and it was described as pleasant by two of the patients. Postural hypotension was noted in all patients for one to two hours following the first few injections. This effect caused no disturbance of consciousness, or any serious discomfort to any of the patients. There was a marked subjective improvement in every case which helped considerably in securing the cooperation of these patients in carrying out the study.

One patient claimed that her vision improved markedly during the course of therapy. This was the one (L.S.) who responded maximally. Unfortunately, it was not possible to place this visual change on an objective basis. Another (C.W.) abruptly stopped having attacks of tic douloureux which had been occurring several times each day before the injections were given. These attacks gradually assumed their old frequency when the administration of CCK 179 (Hydergine) was discontinued.

As might be expected, those who showed the greatest lability responded most favorably to the drug. The duration and quantitative character of the hypertension seemed to have little influence on the effectiveness of the medication. The patient (L.S.) who responded most favorably was eighty-two years old, and had been under anti-hypertensive therapy for twenty-five years.

Every patient exhibited a marked fall in blood pressure immediately after each injection. This fall reached a maximum in thirty to forty-five minutes. The pressure was usually at or very near the basal level at the end of sixty minutes. Severe hypotensive levels were never reached, even when 3.0 cc. was given intravenously. No correlation was noted between the immediate reactiveness of the individual and the effects of continued injections.

Bradycardia was observed in every case following the use of these compounds. The average pulse rate dropped ten to fifteen beats per minute for the thirty minutes following the injection and resumed its pre-injection level by the end of an hour.

Table I summarizes the results of the use of "CCK 179" (Hydergine) in our series of cases. The "Starting Basal" column represents the control blood pressures for each patient. These were determined by averaging the blood pressure readings taken from the patients' charts for a period of time equal to the time during which they received the injections. These control periods were all taken from chart entries made not longer than six months prior to beginning therapy with Hydergine. Under "CCK 179 Basals" are found the means of all the basal pressures taken after the first injection of the drugs. Because the responses began with the first or second injection this method of tabulation was considered adequate to supply a reasonable comparison between the control and experimental findings.

Previous workers have felt that a sustained ten millimeter decrease in diastolic pressure constituted a significant therapeutic response(19). Reference to Table I shows that seven of the eleven subjects or 63.6 per cent of the cases of essential hypertension did exhibit at least a drop of ten millimeters of mercury in their diastolic pressure.

SUMMARY AND CONCLUSIONS

The clinical management of hypertension is at present a combination of rational and purely empirical therapy. Many of the phys-

TABLE I.
THE RESPONSE IN BLOOD PRESSURE
FOLLOWING HYDERGINE THERAPY

CASE	SEX	AGE	TYPE	DURATION THERAPY	STARTING BASAL	CCK 179 BASAL	NET CHANCE
C.W.	F	64	Ess.	6 weeks	208/118	190/104	18/14
M.S.	F	74	Ess.	5 weeks	256/124	230/110	26/14
L.S.	F	82	Ess.	12 weeks	228/116	198/88	30/28
J.T.	M	42	Mal.	4 weeks	225/150	250/152	+25/2
M.P.	F	51	Ess.	4 weeks	230/110	220/110	10/0
I.W.	F	52	Ess.	6 weeks	218/116	188/100	30/16
A.M.	F	54	Ess.	3 weeks	210/110	176/96	34/14
E.D.	F	62	Ess.	3 weeks	179/99	161/95	18/4
M.W.	F	45	Ess.	3 weeks	197/119	177/91	20/28
C.R.	M	69	Ess.	6 weeks	150/90	138/82	12/8
S.G.	F	51	Ess.	3 weeks	220/116	190/100	30/16

iologic principles underlying the disease are well worked out, but many others are still unknown. The clinician faced with treating the patient with this disease can devise treatments that ought to work in the light of what is known but he is seriously handicapped in predicting how effective his therapy is going to be. Too many factors are beyond his control and knowledge.

This report deals with an evaluation of this type of therapy. We have used drugs which possess a depressing effect on two functions of the organism, which appear to be very important in the causation of hypertension. We have fairly definite evidence that we obtained such a depression in all of the patients we treated. Our results show a definitely favorable response in 63.6 per cent of our small series. There is no apparent difference in the clinical pictures of the patients that responded and those that did not. That such a difference exists is obvious, but wherein it lies remains to be seen. All patients treated except (J.T.) expressed subjective improvement and increase of sense of well being. In studying the therapeutic effectiveness of CCK 179 (Hydergine) we were impressed with the absence of toxic reactions following intravenous injection. Increasing the dose of Hydergine from 1 cc. to 2 or 3 cc. did not further increase the fall in blood pressure. The intramuscular route of administration appeared to act in no way different from the intravenous except that the changes in the sphygmonanometer readings were less rapid following injection.

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SAMA JUNE CONVENTION PROGRAM SET

Panel discussions devoted to doctor draft, general practice and SAMA chapter activities will highlight the third annual convention of the Student American Medical Association. More than 1,000 registrants are expected to attend the meeting June 15, 16 and 17 at the Edgewater Beach Hotel, Chicago.

The tentative program announced by President David Buchanan, University of Illinois senior, calls for official business of the House of Delegates on Monday, June 15. That night Abbott Laboratories will be hosts at an informal get-together. Tuesday's program will feature the above panel discussions in the morning and tours of AMA Headquarters in the afternoon. Election of officers and a premier of an outstanding medical film are on the docket for the last day of the meeting. A large technical exhibit will make its initial appearance at a SAMA convention this year. All AMA members are cordially invited to attend the sessions.

Methods For Determining Bacterial Susceptibility To Antimicrobial Agents and Their Relative Value to the Clinician

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Doctor Severens reviews, in some detail, two methods of determining the susceptibility of bacteria to antimicrobial agents. The test tube serial dilution method, while more accurate and informative, he believes to be too time consuming and too expensive for routine use. The paper disc or tablet method gives less information, but is simpler, inexpensive and delivers usable information to the clinician in from six to eighteen hours.

EDITOR

The widespread and successful use of antimicrobial agents in the treatment of bacterial infections and the increasing number of antibiotics available to the clinician has added a new responsibility to diagnostic bacteriology. Since various bacteria differ markedly in their resistance and susceptibility to the various antimicrobial agents, differing between genera, species and strains of the same species, it is important that the clinician be informed not only of the identity of the bacterium, but also of the antibiotic susceptibility of the particular organism. The procedures used in determining bacterial susceptibility or sensitivity to chemotherepeutic substances are known as bacterial sensitivity tests. The in vitro determination of the sensitivity of an organism to an antibiotic may be accomplished in two ways: (1) the test tube serial dilution technique, and (2) the paper disc or tablet technique. It is the purpose of this paper to describe briefly the principle of each technique and to evaluate each as regards accuracy, economy and practicality.

THE TEST TUBE DILUTION METHOD

The test tube serial dilution method for determining bacterial susceptibility to antibiotics, involves the addition of known and graded amounts of a particular antibiotic to a series of tubes containing a standard volume of liquid culture medium. The number of tubes in the series will depend upon the range of antibiotic concentrations desired, but twelve to fifteen tubes are frequently employed. Usually the different amounts of antibiotic in each tube are obtained by use of the serial dilution technique; however, any method which secures a relatively wide range of antibiotic concentration in the series of tubes is permissible.

Following the addition of the desired concentrations of antibiotics to the tubes, each tube is inoculated with a standardized inoculum of the organism under test. After an appropriate period of incubation, the susceptibility of the organism is determined by examining each of the tubes for the presence or absence of bacterial growth as indicated by turbidity of the culture medium. The lowest concentration of antibiotic which completely inhibits the development of the organism is determined and is frequently expressed as the minimal inhibitory concentration (MIC). This method permits the reporting of the results in actual units or micrograms of antibiotic required to arrest the growth of the test organism.

Certain factors need be considered, however, in the performance of these tests if reliable and consistent results are to be obtained. Among these factors are: (1) the culture medium in which the test is performed (2) the stability of the antibiotics; (3) the size of the inoculum; (4) the growth rate of the organism; and, (5) the period of incubation. Once a standard procedure has been adopted and adhered to, satisfactory results can usually be obtained and the reports from a given laboratory can be readily interpreted by the clinical staff with which it is customarily associated.

THE PAPER DISCS OR TABLET TECHNIQUE

This technique is based upon the well known fact that if a paper disc or tablet impregnated with an antibiotic is placed upon an agar culture plate, just subsequent to inoculation, the antibiotic will diffuse into the media adjacent to the disc. The usual procedure in this method is to uniformly inoculate an agar culture plate with infectious material. Following inoculation the discs or tablets are distributed over the surface of the seeded agar. As many as seven or eight discs may be placed upon the same culture plate. The plates are placed in an incubator, where the moisture contained in the agar dissolves the antibiotic, which diffuses into the surrounding agar. If the organisms present on the culture plate are susceptible to a particular antibiotic they will not grow in the medium immediately surrounding the disc containing that antibiotic. There results, therefore, a so-called zone of inhibition (zone of no growth) around discs which contained antibiotics to which the organism under test is susceptible. Thus this test is read by observing for zones of inhibition around the various antibiotic-containing discs or tablets. The presence of a zone of inhibition indicates susceptibility, and, to a limited degree, the size of the zone of inhibition is dependent upon the susceptibility of the organism.

The medium used in this test is not too important, except that it should be capable of supporting the growth of fastidious pathogenic bacteria. Blood agar is a very satisfactory medium since it not only provides the necessary food elements, but aids in the identification of the infecting organism, by indicating the hemolytic properties and other characteristic features of the organisms. After experience has been obtained it is frequently possible to differentiate the pathogens from the saphrophytic organisms, in cases where the material cultures may contain more than one organism.

EVALUATION OF THE TWO TECHNIQUES

Both methods have their proponents which probably indicates that each method is superior to the other in certain ways. It would seem appropriate now to list the advantages of each method and finally to discuss the role of each in diagnostic bacteriology.

To consider first the test tube dilution technique, it may be stated that this method possesses an inherent accuracy not attained in the paper disc method. The ability to express the results in quantitative terms may be extremely advantageous in certain cases, allowing the physician to prescribe antibiotics in doses adequate to arrest the growth of the infecting organism. Use of this method make feasible and desirable the determination of blood levels for purposes of determining whether adequate blood and tissue concentrations are being attained to successfully curb the infection.

The test tube dilution method on the other hand is a time-consuming procedure, especially in instances where the clinician requests that the sensitivity of an organism to four or five antibiotics be determined. The time involved in performing the test is such that its cost prohibits its use as a routine procedure. In addition to the actual time and labor involved in performing the test, more important is the necessary delay in obtaining the results of the test. This delay is due largely to the fact that this method requires the use of pure cultures. Thus it is necessary in most cases to determine and isolate in pure culture the pathogen involved in the infection before the sensitivity test can be performed. This delay, plus the time required to perform the test, detracts considerably from its value, since in most cases the sooner specific antibiotic therapy can be initiated the better are the results.

For these reasons its use may well be restricted to special cases where quantitative results may be of value. In the majority of infections encountered, the accuracy of the test tube dilution is entirely unnecessary: The dilution method may be recommended for determining the sensitivity of organisms isolated from cases of subacute bacterial endocardites and similar infections where accurate information is not only desirable but often necessary. It may also be used to advantage on patients who relapse while on therapy, since it will detect most adequately any increase in resistance of the invading organism.

The paper disc technique has the advantage of being extremely simple to perform and a large number of antibiotics can be tested with only a small outlay of time and materials. This is particularly true if commercially prepared discs are used since they eliminate completely the necessity of preparing antibiotic solutions of any kind. Because of the simplicity and economy of this method it has been more widely adopted than the tube dilution method. The only materials needed are a culture plate and the antibiotic impregnated discs. As many as seven to eight antibiotics may be tested on the same culture plate.

The paper disc method has been criticized in that the method did not reflect accurately enough the true susceptibility of the organism under examination. Part of this criticism is justified because the proponents of this type of test have advocated a semi-quantitative expression of the results obtained. The objections to the use of the disc method as a routine procedure can be met only if its limitations are recognized and no attempt is made to read into the test results that cannot be attained.

To correctly interpret the results of this type of sensitivity test, one must understand that the size of the zone of inhibition is not solely a function of the susceptibility of the organism and the concentration of the antibiotic in the disc or tablet. If this were true the disc method would permit quantitative measurement of resistance and susceptibility. Under the conditions by which the test is usually performed in the clinical laboratory, there are many factors which are not controlled and which cause tremendous variations in the width of the zones of inhibition, even when the susceptibility of the organism and the antibiotic concentration of the discs are kept constant.

Among these factors are: (1) the size of the inoculum; (2) the depth of the agar plate; (3) the moisture content of the agar and (4) the constituents of the agar.

The size or bacterial concentration of the inoculum is a factor which will cause wide variations in the width of the zone of inhibition. Use of a heavy inoculum, eliminates the lag phase in the growth curve of the organism and permits growth of bacteria before the antibiotic has diffused from the disc. Thus one can show experimentally that by varying the size of the inoculum marked differences can be produced in the size of the zones of inhibition. Since this factor cannot be controlled in the clinical laboratory, particularly when the infectious material is transferred directly to the culture plate, the interpretation of the width of the inhibitory zone can not be justified. This objection could probably be overcome if the infectious agents were first isolated and a standard inoculum prepared. This procedure, however, delays the report to the physician by at least twenty-four hours, which reduces the value of a sensitivity test. In most cases, unless the results of the sensitivity test are available quickly the value derived from the test is materially decreased, so the opinion may be expressed that direct inoculation of the culture plate with the infectious material is a desirable and justifiable procedure.

In this connection Fairbrother, Martyn and Parker(1) state that the results of bacteriologic studies indicate that most of the common infections are not caused by a single organism, but by a wide range of organisms which differ widely in susceptibility to chemotherapeutic agents. Spaulding(2) also notes that the introduction of dried antibiotic discs has made antibiotic susceptibility tests practical and within reach of any bacteriology laboratory capable of making cultures. He further states that several pathogens can be identified on the same blood agar plate and their respective susceptibilities can be estimated to as many as six antibiotics.

The other factors mentioned, depth, moisture content and other constituents of the agar medium have all been shown to influence the width of the zone of inhibition. The depth of agar in the plate results in variation since the antibiotic diffusion is downward thru the agar as well as laterally, thus affecting the inhibitory zone of antibiotic. Moisture and other constituents apparently influence the diffusion process and thus produce variable results in the formation of zones of inhibition. It would thus be necessary to standardize agar plates as regards these factors to make the disc test in any sense a quantitative procedure. While this standardization could be done, it is not now being done in clinical laboratories nor is it likely to be done.

In spite of the obvious shortcomings of the paper disc or tablet method it will remain the procedure of choice because of its simplicity and if the test is properly interpreted it is of greater value to the clinician. It probably possesses greater value because of its rapidity, than the tube test ever will, except in the exceptional conditions mentioned earlier. In actual practice it is frequently possible to report the results within five to six hours after obtaining the specimen and they are practically always available within twelve to eighteen hours. This permits the physician to alter his therapy without undue loss of time. Occasionally the infectious material used to inoculate the plate will contain so few bacteria that only a few colonies will develop on the plate, making it difficult to determine their susceptibility. In these cases it may be necessary to re-plate the colonies and repeat the sensitivity test.

The report from the disc type sensitivity test should indicate simply whether the organism is susceptible or not susceptible. In many instances it is possible to give the relative effectiveness of the various antibiotics when several discs are employed on the same culture plate, since in this particular instance the discs are all under similar conditions. It should again be emphasized that in any given test only the relative effectiveness can be determined and even then the possible differences due to inherent differences in diffusibility is not taken into account.

Of prime importance in the disc method is the concentration of the antibiotic employed in the discs. The test is of greater significance if the disc contains a concentration which will produce in the media a concentration comparable to that attained in the blood of a patient receiving generally accepted doses of the antibiotic. If this condition is fulfilled any perceptible zone of inhibition around the disc would indicate that ordinary doses of the antibiotic would be effective therapeutically*. For routine purposes therefore, it can be recommended that discs or tablets containing low antibiotic concentration be used. The chief value of discs containing higher concentrations is to obtain information regarding cultures that exhibit a fair degree of resistance. In these cases the discs of greater potency may yield a lead as to the drug most likely to give good results.

Evidence is available that there exists an excellent correlation between the results of in vitro sensitivity tests and the clinical response of the patient. In a recent study, Broom, Martineau and Young(3) have shown that the correlation of the clinical course of the patients treated with antibiotics reveals that in practically every instance patients treated with antibiotics shown to be effective by the disc method responded favorably. Furthermore they were not favorably influenced by antibiotics to which the bacteria were shown to be resistant. Thus the disc test, because of its simplicity, economy and general adequacy offers much to the physician as a guide to effective chemotherapy.

SUMMARY

Two methods are available for determining bacterial susceptibility to antimicrobial agents. These are: (1) the test tube dilution method; and, (2) the paper disc or tablet method. An evaluation of these two methods suggests, with a few exceptions, that the disc or tablet method is to be preferred for routine purposes.

The reasons for this preference are: The ease with which the test may be performed; its economy in time, labor and materials; as well as the provision of adequate results in a minimum period of time.

The tube test is indispensable under certain conditions, where a high degree of accuracy is necessary. Factors to be considered in performing each type of test are discussed.

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*Lower concentrations of commercially available discs usually approach this.

Chondrosarcoma of Thorax, Rectal Polyps and Cancer of Rectum*

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Among the most common tumors of the bony thorax of adults are the chondrosarcomas. They are slow-growing tumors, deceptively benign in appearance. Nevertheless such tumors are malignant, and if inadequately treated, will recur locally and, eventually, kill by local invasion or distant metastasis.

In common with other sarcomas they are radio resistant and are best treated surgically. Surgical treatment adheres to the principles of sarcoma surgery which varies somewhat from carcinoma surgery. In general the emphasis, in proper surgical treatment, is on wide local excision; a block dissection is less urgently indicated than in carcinoma surgery.

CASE REPORT

A 56-year-old white male was admitted to the hospital 4-23-51, for the treatment of bleeding hemorrhoids. He had treated them for the past fifteen to twenty years in various non-surgical ways. In the preceding two years symptoms became more severe and interfered with his employment. He had become increasingly aware of bleeding when passing stools. In addition he complained of a hard tumor mass in his left chest at the sternoclavicular junction. This mass had been growing slightly for the past few years but was otherwise asymptomatic. Physical examination revealed a well-developed and well-nourished ambulant white male who did not appear to be acutely ill. The blood pressure was 154/100 and the temperature was normal. There was an oval mass 5 cm. in its longest diameter, apparently attached to the lower edge of the left clavicle or to the underlying first rib. The mass was non-tender and non-fluctuant. Digital rectal examiation revealed the presence of external and internal hemorrhoids and a moderate prostatic hypertrophy.

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*Sponsored by the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the author are a result of his own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

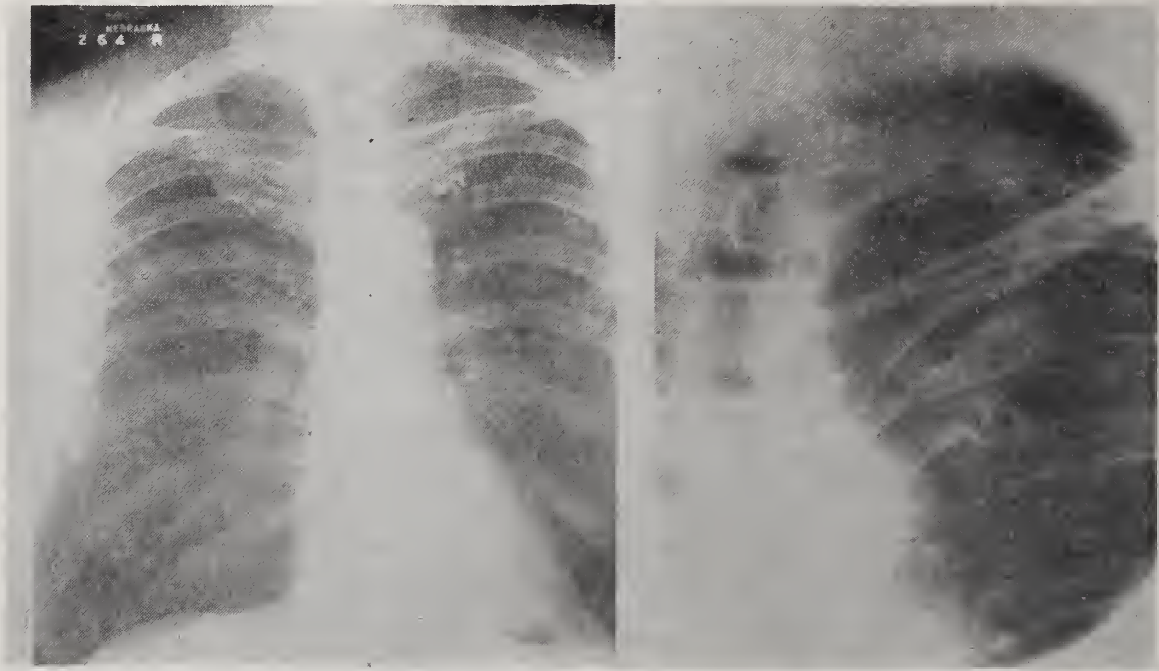

Fig. 1—Preoperative roentgenograms illustrating the tumor near the left costosternal junction; there also is some spurring of the joint.

Protoscopic examination discovered the presence of several sessile polyps which were biopsied and reported as benign rectal polyps. Laboratory tests were within normal limits. Roentgenograms of the chest revealed normal lung fields and a convex mass in the anterior chest wall at the sternal end of the first rib. The roentgenographical impression was that this was an osteochondroma. (Fig. 1.) On 5-8-51, the patient was operated upon, and the tumor mass was widely resected. The clavicle was divided in its medial third, as was the first rib, and removed, together with the left half of the manubrium sternum. At no time was the tumor exposed by dissection, and an adequate amount of healthy tissue was removed with it. (Fig. 2.) After removal of the chest tumor a hemorrhoidectomy was accomplished.

Histopathologic study of the tumor revealed a rather sharply demarcated lesion containing cells showing considerable variability in nuclear size and shape, with many large vesicular nuclei and occasional lacunae containing from 2-4 bizarre nuclei. The variability in nuclear pattern and lack of good organization suggested a low-grade malignancy. The diagnosis was chondrosarcoma, low grade.

Recovery from the operations was uneventful, and he was discharged on the ninth postoperative day. Several attempts were made to have the patient report for follow-up examination not only of the thoracic lesion but also of the rectal polyps. He consistently refused to come for examination until July 11, 1952, when he appeared of his own volition complaining of abdominal cramps and diarrhea. Physical examination, at this time, revealed a well-healed thoracic scar (Fig. 3); a chest plate was normal except for the surgical defect. (Fig. 4.) Rectal examination, however, disclosed a mass which, on proctoscopic biopsy, was found to be an adenocarcinoma. A Miles type abdomino-perineal resection of the rectum was done.

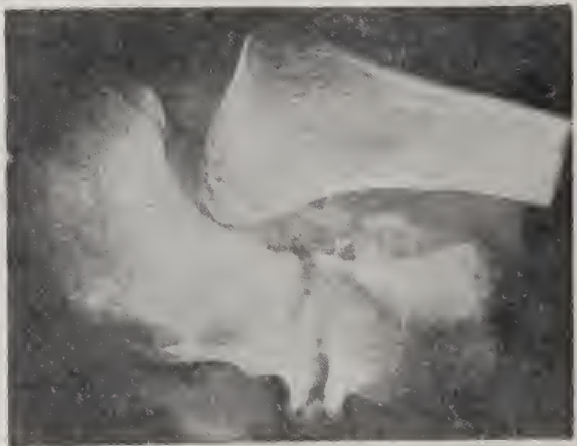

Fig. 2—Postoperative roentgenogram of the surgical specimen.

DISCUSSION

A review of this case indicates several points of interest. First, it represents the almost simultaneous development of malignant lesions of the bony thorax and of the rectum. The bone tumor was small and of a low grade malignancy. Surgical cure of this lesion was anticipated.

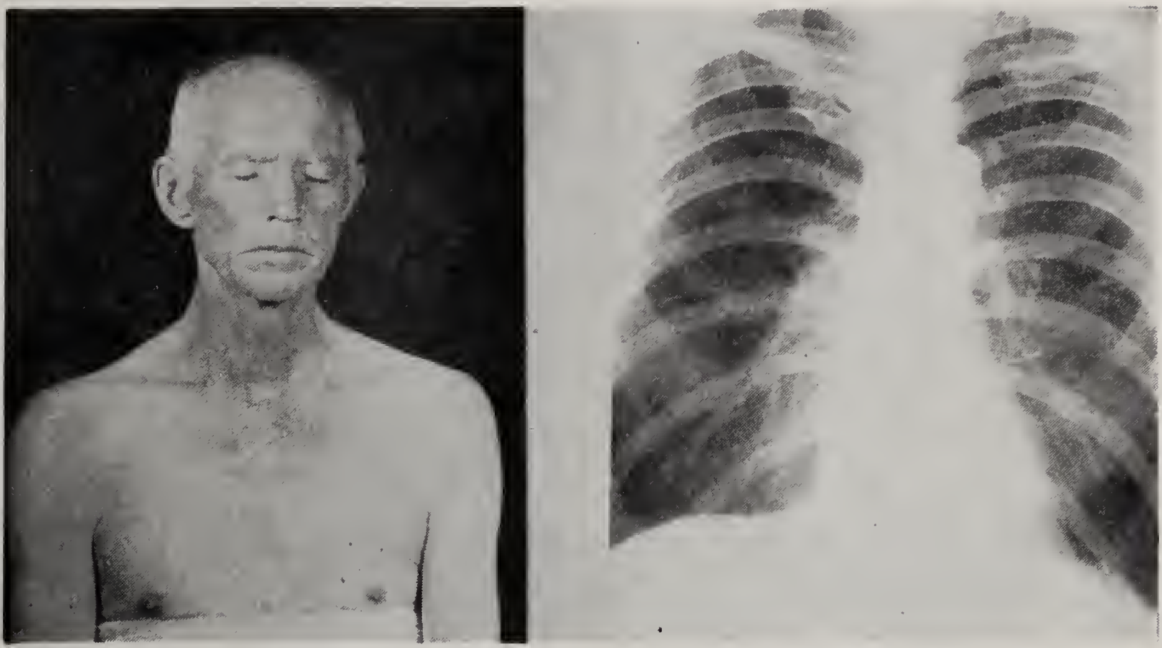

Fig. 3—One year after resection of the chondrosarcoma, showing the chest scar and the postoperative roentgenogram.

The tumor of the rectum, on the other hand, was quite large when discovered, and cure of this lesion is certainly in doubt. More adequate follow-up of the previously diagnosed benign polyps would have contributed to an earlier discovery of the lesion.

This case illustrates in a dramatic manner two well established clinical facts. First, that a patient who is discovered to have a cancer is more susceptible to development of a second malignant growth than the average. Second, that rectal polyps, benign or otherwise, are important indications of a premalignant diathesis in the rectal mucosa. Both taken together emphasize the importance of regular follow-up examinations of all individuals who have or have had a malignant disease.

The physician who discovers a cancer in a patient seldom has difficulty in convincing him of the need for routine follow-up examinations. It is a little more difficult to convince the patient with rectal polyps to submit to routine examination. This is largely due to the fact that rectal examinations, which require proctoscopy and barium enema, are unpleasant. It is the physician's responsibility, therefore, to adequately inform the patient of the serious implications of rectal polyps, that while a cancer has not yet formed, the possibility of one developing is great and must be watched for in spite of unpleasant examinations.

SUMMARY

A case is reported in which malignant disease was found to involve the bony thorax and the rectum. It also indicates the need for regular follow-up examinations of all patients who have malignant disease as well as those who have rectal polyps.

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Schools of professional nursing in the United State admitted 42,103 new student nurses in 1952, it was announced recently by Theresa I. Lynch, Chairman of the Committee on Careers in Nursing, National League for Nursing, which conducts the national student nurse recruitment program. An additional 439 students entered nursing schools in Hawaii and Puerto Rico, bringing the total number of new student nurses in the United States and territories to 42,542 in 1952, compared to a total of 42,053 in 1951.

Sugar has 1,794 calories a pound, only half as many as a pound of butter. Any food is fattening if the total calories consumed are more than the body requires.

Carcinoma (?) of the Thyroid Gland*

DR. R. F. MUELLER: This patient, a sixty-one year old female, was first seen in the office with the chief complaint of large veins of both legs, present for many years with ulceration above both ankles present for approximately six months. During the past two to three months there has been extensive weeping and drainage from the ulcerations requiring daily changes of bandages and dressings by the patient.

In her past history there has been no previous medical attention in the past sixteen years. Approximately seventeen years ago a thyroidectomy was performed. In the more recent past she has had dyspnea for the past year which has been increasing slightly in severity. Family history indicates that her father died at the age of seventy-two of carcinoma of the stomach and her mother at the age of forty-eight, of dropsy.

On physical examination this woman is moderately tall for her weight. She appears somewhat older than sixty-one, is fairly well nourished and does not appear seriously ill. Inspection of the neck shows a scar of previous surgery and on the left side of the neck there is a mass about five cm. by three cm. in size and situated well above the thyroidectomy scar. However, the lower border of the mass is situated at the level af the scar and apparently attached to it at a deeper level. The mass is moveable, definitely firm and quite hard. Situated on the trachea there is a palpable small mass, one by one and one-half cm. in diameter which is fixed to the trachea, hard and not tender. No other masses are present in the left side of the neck and there are no enlargements palpable on the right side of the neck. The heart is fibrillating at the rate of ninety-four and no other significant lesions are found in the chest.

Examination of the lower extremities revealed extensive varicosities and incompetence of the saphenous system with edema and circulatory decompensation and ulceration bilaterally in the lower third of the legs. The patient has been in the hospital for the past ten days. Cardiac consultation indicated that the condition of the heart could be benefited by medical treatment before serious surgery was entertained. Consequently, she has been under cardiac treatment. She has lost about nine pounds in weight, probably representing fluid loss. Some chronic passive congestion of the lungs was discovered which has improved, her dyspnea is markedly lessened and the cardiac rate is lower since treatment has been instituted. It is thought that the heart pathology is that of mitral stenosis on the basis of an old rheumatic heart disease. During the past week while under treatment for heart condition a bilateral saphenous vein ligation was performed under local anesthesia. Her general condition is now such that consideration of surgical treatment of the neck lesion may be entertained.

The clinical diagnosis is carcinoma of the thyroid, with metastasis to the cervical nodes. It is proposed at this time that the node be removed for a frozen section and if the diagnosis of carcinoma is substantiated, a radical neck dissection be undertaken, depending upon the type of carcinoma found on pathological examination. In view of the patient's heart factor we do not think that radical surgery should be undertaken unless necessary and that if the lesion is of the papillary type, the surgery be confined to a resection of the node bearing area.

DR. M. NEELY: When was the first operation?

DR. R. MUELLER: Sixteen years ago.

DR. R. WHITHAM: How long was the mass present?

DR. R. MUELLER: She was not conscious of the mass being there.

DR. G. COVEY: I would like to know the reason for the two different ideas on the extent of operation.

DR. R. MUELLER: If a low grade carcinoma is found, radical neck dissection, in a patient of this age with a heart lesion, probably is not necessary or justifiable such as it would be in a younger patient.

DR. M. NEELY: It would be interesting to view that slide of 16 years ago.

DR. R. MUELLER: This patient's previous surgery was performed in another hospital in this city, and the pathological record cannot be located, nor can the slide.

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*Lincoln Hospitals Tumor Clinic. Lincoln General, Bryan Memorial and St. Elizabeth's Hospitals participating. John T. McGreer, Chairman.

(Editor's Note: This excerpt from the transcribed transactions of the Lincoln Hospitals' Tumor Clinic was prepared for publication by Doctor J. Marshall Neely.)

DR. R. WHITHAM: I am a little at sea in this case. In the first place, I don't think that a diagnosis has been established, and I am sure that Dr. Mueller will agree with me on that. I would question the advisability of depending upon a frozen section, and deciding what to do immediately on that basis. I think it would be a fine idea to get a biopsy of this tumor, or at least to excise the tumor and see what you have. It would strike me that there is a localized tumor that is off on one side. It could probably be excised under local anesthesia and then the diagnosis be made on the basis of permanent sections. If that is carcinoma, it either could be cured by removal of the local tumor, or it would probably be beyond cure. I doubt if an operation extended beyond that point is justified.

DR. M. NEELY: From the point of histology one could be reasonably sure from frozen section that it was either a papillary carcinoma of the thyroid or something else, but it should be studied before radical surgery.

DR. R. MUELLER: I think that the pathologist can, in this instance, give us some valuable information at the time of surgery, so that in one surgical procedure we can do all that needs to be done. I do not propose a radical neck dissection in this patient. However, I think that all pathological tissue should be removed regardless of the type of pathology found, and particularly if carcinoma is found.

DR. J. McGREER: If there are no other comments, that is all for this morning.

SUBSEQUENT COURSE

On January 31, 1951, the neck was explored under local anesthesia and the masses removed. The frozen sections at the time indicated that the masses were benign, so the dissection was limited to the removal of the masses present, one of which was quite hard and firm. The pathological report was that the specimen "consisted of two pieces of tissue, one 6 by 3.5 cm. in size and the second one 4 by 2.5 cm. in size," the smaller being cystic and calcified.

Microscopic examination revealed that the various sections taken from the masses showed cystic calcified material in a mixed fetal and colloid adenoma of the thyroid. Multiple adenomas were present and there were several fetal adenomas. There was no evidence of any malignant neoplastic change in the available sections.

Conclusion of the pathological diagnosis was:

(1) Mixed colloid and fetal adenomas of the thyroid gland.

(2) Calcification of cystic colloid adenoma.

Comment: Fortunately, in this instance, no malignancy was found and the clinical diagnosis of carcinoma proved to be incorrect. This is the reverse of the usual result. Ordinarily carcinoma of the thyroid is not diagnosed clinically. At least, in the experience of most hospitals, it is usually encountered only upon examination of the pathological specimen. Consequently, it is wise to suspect the presence of carcinoma in suspicious lesions and have a program ready for the surgical management of the carcinoma if found at the time of surgery.

EXPENSES CLAIM TWO-FIFTHS OF AVERAGE M.D.'S INCOME

The average physician in private practice spent $9,508 — two-fifths of his gross income — on operating expenses in 1951.

This is revealed in the January issue of Medical Economics, national business magazine for physicians. The magazine is publishing the results of a nationwide survey of medical practice, based on a questionnaire sent to each of its 134,000 M.D.-readers.

According to the survey, the average doctor's professional expenses rose 24 per cent from 1947 to 1951. They came to only $7,200 in 1947.

Office assistants' salaries alone cost the average doctor $2,689 in 1951. Other major expense items were drugs and supplies ($1,966); office rent ($1,149); auto upkeep ($882); and instruments and equipment ($661).

Medical Economics found that doctors in small towns generally spend a higher percentage of their gross income on expenses than medical men in large metropolitan centers. Operating costs also tend to be proportionately higher among physicians with low incomes than among those in the upper brackets.

Tuberculosis in the diabetic tends to be acute, exudative, and progressive. It shows little tendency to spontaneous fibrosis. The diabetic suffering from such tuberculosis is toxic just as the non-diabetic is with the same type of acute tuberculous disease. (David A. Cooper, M.D., and Katharine Boucot, M.D., The American J. of Nursing, Nov. 1952).

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THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

JOURNAL ADVERTISERS

Last September an item appeared in The Nebraska State Medical Journal pointing to the importance of physicians expressing their appreciation to the advertisers for their support of the journal through their respective advertising programs. The item said in part:

"As has been said many times — and cannot be said too often — it is the advertisers who make the journal possible. Put another way, if it were not for their support, the journal would either cease to be published or serious changes would need to be made in the method of financing it."

Since then, several Nebraska physicians have cooperated marvelously by writing the advertisers. The value of such communications is perhaps best illustrated by the replies to these letters. Here are just a few of the comments made by some of the advertisers:

"You and several of your Nebraska colleagues who have also written us are noteworthy for such action because such a thing has rarely or never occurred to us before in our experience. We are grateful for your kindness."

"It is always gratifying to receive comments like yours, and you may be sure that we are indeed pleased to be able to cooperate in an advertising way with you and other members of the Nebraska State Medical Association."

"We are indeed most gratified to have your letter . . . We realize that the physician's approval of our advertising as well as our product is of great importance to our success."

Won't you, too, drop the advertisers a note? Common courtesy would indicate that this be done. The above comments show that such letters are gratefully received.

MALPRACTICE INSURANCE

A good many physicians in Nebraska—and throughout the nation, for that matter—have made inquiry about an increase in their malpractice insurance rates. Physicians everywhere are wondering why it has seemingly become necessary for insurance companies to adjust their rates upwards. They are also asking what determines malpractice insurance rates.

In answer to these inquiries, the American Medical Association Council on Medical Service has published a statement in the February 28, 1953, issue of The Journal of the A.M.A. Following is a resume of that statement:

Physicians may anticipate rate changes in several jurisdictions at the time their policies come up for renewal. Until recently each insurance company set its rates on the basis of its own experience. There was little uniformity in the rates. Litigation has recently reversed a long-standing tradition and has declared that insurance is interstate commerce. As a result, these rates have become subject to regulation by the insurance supervisory authorities in each state.

The National Bureau of Casualty Underwriters has formulated rates for malpractice insurance. This bureau is a voluntary statistical and rating organization composed of member insurance companies. Since some companies do not handle a sufficient volume of some classes of insurance to set rates on the basis of their own experience, the bureau uses the combined experience of member companies in establishing rates. The rates are then filed with each state by the bureau. In addition, the bureau develops different classifications of risks.

Space will not permit a detailed examination of how rates are set for each classification. For this information, kindly refer to J.A.M.A. issued listed above. It can be noted however, that Nebraska has been given a basic rate of $35.00. Upper limits of coverage are based on this figure.

The Council on Medical Service stated it did not have sufficient information to definitely determine why insurance rates should be increased at this time. It is suggested that increased incidence of claims or more generous awards by juries may have a bearing. In some jurisdictions, both may be contributing factors.

The council feels that competition among the companies, along with the regulatory powers of the state insurance companies will tend to minimize the possibility of abnormal high rates and profits. It was also noted that since the insurer agrees to provide both financial and legal protection, administrative costs may be higher than in certain other lines. In some cases, insurance companies spend larger sums for legal defense than they do for liabilities.

(It seems difficult to justify an increase in malpractice insurance rates for Nebraska since this state has had an exceedingly low incidence of these cases for several years. Some feel that the rates have been increased in Nebraska as a result of the high incidence in other states. It should be noted here that the relatively few malpractice suits in this state is primarily a result of the effective work being done by the Medicolegal Advise Committee of the Nebraska State Medical Association).

BOARD OF HEALTH CREATED

For the first time in its history, Nebraska now has a State Board of Health. Legislation establishing this board was passed by the legislature on March 3, and signed by the Governor on March 11. Thus, Nebraska has joined with a majority of other states in having this type of health board.

The new Board of Health has wide authority in the state's public health programs. It has the power to appoint the director of the State Department of Health and to set his salary. The new law provides that this salary shall not exceed $12,500. In addition, the board will determine policy and promulgate regulations for the Department of Health. The law also states that the director of health is to be the executive officer of the board and chief administrative officer of the health department.

Composition of the board is as follows: Two physicians, one dentist, one veterinarian, one engineer and two others who have wide interests in public health problems, the board to be appointed by the Governor. There was no serious opposition to the board, although some difficulty did arise in setting up the proper personnel for it.

It should be noted that two bills providing for similar boards of health were introduced in the legislature at its session two years ago. One bill was introduced by the Nebraska State Medical Association; the other by a group in Omaha. These bills differed in many respects, and both were subsequently killed by the legislators. As a result, however, the Legislative Council of the legislature appointed a Public Health Committee to take the problem under advisement. It was this group that, after consultation with several health organizations, formulated the health board bill which has been enacted into law.

About the time the bill came up for passage, a group opposed to the creation of a road commission, discovered a provision in the constitution which stated that the executive heads of all state government departments shall reside in the capitol city. Unfortunately, this ruling applies to the Board of Health since it is the executive head of the Department of Health. In spite of this one drawback, the legislature passed the bill since it had progressed so far and because it was realized that the board would lead to many improvements in the health department. This means that the members of the first board will have to be chosen from Lincoln.

The original concept of the medical association and the Public Health Committee of the Legislative Council was that members of the board should be appointed from all parts of the state. It has been learned, however, that one of the committees of the legislature, or the Governor, will introduce legislation providing for a vote of the people on a constitutional amendment which would abolish this provision regarding the residence of executive heads.

The medical association hopes that this can be accomplished so that succeeding appointments to the Board of Health may be made from all sectors of Nebraska. Nevertheless, the association and the legislature feel that the board will cause many improvements in the operation of the State Department of Health. This opinion is also held by Dr. E. A. Rogers, who has served as acting director of the department for almost two years.

High commendation should be given to Senator O. H. Person, Wahoo, and his committee for the fine work they have done in preparing and sponsoring the health board bill in the legislature. Other members of Senator Person's committee were: Senators Cole, Larkin, Lillibridge and Syas.

Last year, heart disease caused more than 760,000 deaths. Some 10,000,000 people in the United States are affected by some form of heart and blood vessel disease. Contributions to the Heart Fund help combat this leading threat to our nation's health.

News and Views

From a wire service:

Bismarck, N.D. — The house has passed a senate bill calling for establishment of a four-year medical school at the University of North Dakota at Grand Forks by 1956. Specifically, the bill . . . requires the state board of higher education to retain sufficient funds . . to establish a third year of medicine by 1955 and a fourth year by 1956. Two years of medical training are now provided.

From The Fremont Guide-Tribune:

The Pulaski County (Little Rock) Medical Society broke precedent, March 2, by electing four Negro doctors to membership. Elected by acclamation and without discussion were Drs. O. B. White, J. M. Robinson, G. W. S. Ish and Hugh Browne.

Dr. Raymond C. Cook, society President, said the four — who did not attend the meeting — "met all professional qualifications and were thoroughly investigated by our credentials committee."

Doctor White said that, through the society's action, "Arkansas has gone a step forward in race relations."

From The Omaha World-Herald:

Sen. Arthur Carmody, Trenton, Chairman of the legislature's Budget Committee, has presented a new plan which, if constitutional, would permit the University of Nebraska College of Medicine to construct necessary new buildings within the next few years, but paid for over a longer period.

He said he is asking the Attorney General for an opinion on the constitutionality of this approach:

Some kind of medical college building authority would be created, with the power to issue revenue bonds to pay for the needed buildings. The university would rent the structures from the building authority, and the rentals would pay off the revenue bonds over a period of perhaps 15 or 20 years.

A bill already before the legislature proposes a special .33-mill levy for the next six years to raise six million dollars for new buildings on the college of medicine campus. With this mill levy, Senator Carmody said, the money for the whole program could not be raised for six years, and another two years would be needed for construction.

He said his proposal would allow an immediate building program with money from the revenue bonds. The two approaches might be combined, he added. Income from a special tax of .15 or .25 of a mill might be used to pay the rental on the buildings and thus retire the revenue bonds.

Under the Nebraska constitution, the state cannot issue bonds. However, special corporations have been set up to provide revenue bonds for construction of dormitories at the University of Nebraska and state teachers colleges.

From The Omaha World-Herald:

Representative A. L. Miller has introduced legislation that is aimed at doing something about the present overlapping of functions in the health field. Doctor Miller says there are 44 different agencies in the Government that have jurisdiction over various aspects of health.

His bill to establish a new Department of Public Health and Welfare, with Cabinet status, would bring them all into that one department, he said. President Eisenhower already is on record as favoring Cabinet rank for the Federal Security Administrator, Oveta Culp Hobby. Doctor Miller's bill would do that.

The Nebraskan introduced legislation similar to his present bill in 1947 and again in 1949.

The Nebraska Heart Association has presented checks of $2,000 to the heart disease clinics of Creighton University School of Medicine and the University of Nebraska College of Medicine. The money is to be used for treatment and research. It represents part of the money contributed to the association through last year's heart fund campaign and Community Chest drives.

The checks were presented by Dr. Edmond M. Walsh, Omaha, Heart Association President, to Dr. F. G. Gillick, Dean of the Creighton Medical School, and Dr. F. L. Dunn, Professor of Medicine, at the University of Nebraska College of Medicine. Similar presentations have been awarded the clinics for several years.

From a wire service:

The number of students seeking to become doctors dropped off this year for the third straight year. John M. Stalnaker, director of studies of the American Medical Colleges, reported that 13,613 students applied for admission to the nation's medical schools this year. This was 3,150 fewer than applied in 1951-52 and 7,600 less than three years ago.

From news dispatches:

During the early part of February, Dr. Edwin D. Lyman, Director of the Omaha-Douglas County Health Department, made some comparisons and found out that the "styles in death" change, too.

Dr. Lyman took a page from the department's 1880 ledger showing 32 deaths. Twenty-five of these died of an infectious disease — typhoid, cholera or pneumonia. The average age of these 32 deaths was 15.

He compared this with the last 32 deaths of this year. The average age of these deaths was 67, and all but two died from complications of old age.

From The Omaha World-Herald:

Striking new evidence that the pituitary gland may hold the key to the cause of cancer was reported February 5 by a Stanford University research team. The experimenters found that rats are practically immune to liver cancer if their pituitary glands are removed. The Stanford experiment was reported in The Cancer Research Journal.

An editorial from The Fairbury News:

Dr. Louis H. Bauer, President of the American Medical Association has outlined a thorough-going program for what he terms "the preservation of our American system of medicine." His constructive points, which are directed to all physicians and to all component societies of the A.M.A., include:

Work with rural communities to establish facilities for physicians so that we shall have a better distribution of physicians.

See that good medical care for the indigent is available everywhere.

Extend public health coverage to areas lacking it, and develop plans for the care of the chronic invalid.

Expand our voluntary health insurance program, not only to cover more persons, but to cover those over age 65 and those suffering illnesses of long duration.

See that the public is protected so that it can always obtain the services of physicians.

Revitalize our county medical societies and make them leaders in their communities in all health matters.

Here is the positive answer to those who have attempted to delude the lay public into believing that the only solution to expanding an improved medical service is socialized medicine. The fact is that this country has seen greater progress in medical care under private medical initiative than any other major nation — and the medical fraternity is giving endless thought and concrete effort to making it still better.

The problem now, of course, is to get into action and bring about the constructive points outlined by Dr. Bauer. If his program were carried out the newly coined term "socialized medicine" would become obsolete as quickly as it came into such common usage.

From The Shelton Clipper:

Dr. E. A. Rogers, Lincoln, Acting Director, State Department of Health, sent the following advice to the Shelton community regarding plans for its annual fall festival:

"Speaking for the State Health Department, public health workers generally, and also reflecting the views of the National Foundation for Infantile Paralysis, it is undesirable to let poliomyelitis interfere with normal community activities. My advice would be to go ahead and make your plans as though there never had been such a thing as a polio epidemic.

"It is not possible to say that there is absolutely no public reaction to public gatherings during the polio season. However, I do not believe that we should try to promote unfavorable public reactions by giving poliomyelitis an importance it does not deserve.

"There are exceptions to all rules, of course, and should your community be hit by a severe outbreak of polio shortly before your planned public gathering, and should young people play a prominent part in your affair, then perhaps you might want to make some last minute changes in your plans.

"From the practical standpoint, we had a pretty good State Fair here last year, with the children attending from all over the state, with no increase in polio attributable to this event. Also, we opened our Lincoln city schools in the face of a continuing high incidence of polio (and in the face of some vociferous objections on the part of some emotionally disturbed parents) and instead of a rise in cases, the cases started falling off about that time."

From "Secretary's Letter," March 6, 1953:

"During hearings on a divorce bill, a Chicago Superior court judge, Donald S. McKinlay, lambasted veterans hospitals in no uncertain terms.

"He said they were havens for men without service-connected-disabilities who do not want to work, and promised he would seek to have admissions tightened up and the rules changed to limit patients to war-connected ailments.

"Judge McKinlay's attack included a charge that veterans administration hospitals are 'a big step toward socialized medicine.'

"The attack came after a woman testified that her husband had been at nearby Hines Veterans Hospital since last October 20 when they separated. She said he was suffering from a back ailment.

"There are far too many persons at Hines, and other VA hospitals who do not belong there, the judge said. 'The admittance rules should be changed'."

From Information Report, Animal Welfare Institute, Jan.-Feb., 1953:

After a year of experimenting, the Hormel Packing Plant at Austin, Minn., has developed and is now using a method of producing anesthesia in hogs for the killing process. This is accomplished by the use of carbon dioxide gas. A full account is given in this bulletin by Mr. L. W. Murphy. The report has the following to say of this process:

"The most important new development for the prevention of cruelty to animals in the United States in 1952 took place in Austin, Minnesota at the George A. Hormel packing plant. Ten thousand hogs are received daily at this plant, and all of them are now anesthetized prior to slaughter. Pain and fear are eliminated and, at the same time, the efficiency of the operation is increased . . ."

DOCTORS HELP SUPPORT MEDICAL SCHOOLS

Nearly 37,000 physicians contributed more than $3,150,000 in direct support of medical education last year. This total, however, does not include amounts given for buildings, endowments, scholarships, research and other special purposes. Dr. Donald G. Anderson, secretary of the AMA's Council on Medical Education and Hospitals, announced that reports from 76 of the country's 79 medical schools indicate that more than 29,000 doctors gave $2,258,534 directly for teaching budgets.

The American Medical Education Foundation raised $906,553 of the total from more than 7,000 individual contributors. The AMEF's 1953 fund-raising drive has been launched with a third gift of $500,000 from the AMA. Since its organization two years ago, the Foundation has raised more than two million dollars from the medical profession for distribution "without strings attached" to medical schools.

CURRENT AMA POLICY ON DOCTOR DRAFT LEGISLATION

Representatives of the American Medical Association met in Washington last month to review the new "doctor draft" bill which the Department of Defense will present to Congress. The AMA policy and position on any extension or revision of the law was presented to the Department of Defense and is incorporated in the following points:

1. Any proposed legislation should specifically extend the primary obligation of physicians now classified in priorities 1 and 2 who are not called into service before July 1, 1953.

2. An amendment should be suggested to the basic Selective Service Act which would obligate physicians covered by the basic Act for military service without permitting deferments because of dependency or marital status.

3. The Association should advocate adoption of legislation to provide for the recognition of military service since Sept. 1, 1939, with countries which were allies of the U.S.

4. The present maximum age—registration, age 50; obligation to serve, age 51—should be preserved.

5. The present law should be amended to require registration of physicians, under age 50, who do not have reserve commissions in the armed services medical corps.

6. Physicians who have not served since Sept. 6, 1940, should be called acording to age—youngest men first—after physicians currently classified in priorities 1 and 2 have been called up or deferred for reasons of essentiality or physical disability.

7. Physicians with military service since Sept. 16, 1940, should be called according to past service —those with the least amount of service first—after physicians currently classified in priorities 1, 2 and 3 are called up or deferred for reasons of essentiality or physical disability.

8. No distinction should be made between service in World War II and service since June, 1950.

9. The present concept of deferring physicians regardless of their priority classification if they are esssential to the national health, safety or interest should be continued.

10. Legislative authority to establish national and state medical advisory committees to the Selective Service System should be continued.

11. Any extension of the doctor draft law should be limited to one year.

12. In an effort to insure a more equitable utilization of medical manpower by the armed services,

the Association recommends the establishment of a new position as Assistant Secretary of Defense for Health Affairs. It appears that the proper way to provide for this would be by an amendment to the National Security Act of 1947, as amended.

It was also recommended that a lesser period of service be established for those physicians who had at least 12 months of prior military duty since Sept. 16, 1940.

Nearly 200 Lincoln doctors' office employees attended a dinner meeting held March 5 at Hotel Cornhusker. The event, under joint sponsorship of Lancaster County Medical Society and Nebraska Blue Cross-Blue Shield Plans, was held to provide an opportunity for the discussion of the role of doctors' office personnel in the public relations program of the medical profession.

Speakers were Drs. Frank H. Tanner, W. W. Carveth, Oris A. Neely, and Donald F. Purvis.

Information on Blue Cross - Blue Shield was presented by Joseph O. Burger and Dewey M. Bredemeyer.

The House of Delegates of the American Medical Association met in special session in Washington, D.C., on March 14th. At that time they approved, in full, a report by the Board of Trustees supporting President Eisenhower's plan for a new Department of Health.

The President's Reorganization Plan No. 1, creating a Department of Health, Education, and Welfare, was submitted to both the House and the Senate on March 12th, 1953. If the House and Senate follow through promptly and pass resolutions of approval, this plan could be put in operation ten days after the votes.

Watch your Journal of the American Medical Association for the details of the plan and for the reservations stipulated by the House of Delegates.

Announcements

A Graduate Instructional Course in Allergy will be held at the Conrad Hilton Hotel in Chicago, April 24-29, 1953. This is under the auspices of the American College of Allergists and will include all aspects of allergic disease. Papers, seminars, round table discussions and clinics will be used in instruction. The fee for the course is fifty dollars. The American College of Allergists, Inc., 401 LaSalle Medical Building, Minneapolis 2, Minn.

On February 28th, following a forenoon devoted to a very interesting group of talks on cardiac disease, the Nebraska Heart Association held its annual meeting. The following officers were elected for the ensuing year: For President, Dr. F. Lowell Dunn; President-elect, Dr. F. G. Gillick; First Vice Pres., Dr. Wayne Waddell; Second Vice Pres., W. Max Gentry; Secretary, Dr. S. L. Magiera, and Treasurer, Mr. David F. Davis.

It was decided that the Fall Clinical Meeting of the Association will be held in Omaha, in conjunction with the Iowa Heart Association.

The Seventh Annual Regional Meeting of the Nebraska chapter of the American College of Physicians was held at the Hotel Paxton in Omaha, the afternoon of February 28th. There are now seventy-one Fellows and Associates in Nebraska, most of whom attend the sessions. A social hour following the afternoon session preceded the dinner. After dinner, T. Grier Miller, M.D., F.A.C.P., of Philadelphia, president of the American College addressed the assembly on College Affairs.

Coming Medical Events

ANNUAL SESSION, NEBRASKA STATE MEDICAL ASSOCIATION, May 11-14, 1953, Paxton Hotel, Omaha. M. C. Smith, Executive Secretary, 1315 Sharp Building, Lincoln 8.

ANNUAL SESSION, AMERICAN MEDICAL ASSOCIATION, June 1-5, 1953, New York City, N.Y. George F. Lull, M.D., Secretary, 535 North Dearborn, Chicago 10.

WEST CENTRAL DIABETES ASSOCIATION, May 11, 1953, Paxton Hotel, Omaha. F. L. Rogers, M.D., 805 Sharp Building, Lincoln 8.

NEBRASKA ACADEMY OF OPHTHALMOLOGY & OTOLARYNGOLOGY, May 11, 1953, Paxton Hotel, Omaha. Paul Peterson, M.D., 702 Sharp Building, Lincoln.

ANNUAL MEETING, AMERICAN GOITER ASSOCIATION, Drake Hotel, Chicago, Illinois, May 7-9, 1953. George C. Shivers, M.D., 18½ N. Tejon Street, Colorado Springs, Colo.

CREIGHTON POSTGRADUATE ASSEMBLY, April 16-18, 1953, Omaha. F. G. Gillick, M.D., Dean, Creighton University School of Medicine, Omaha.

DR. F. G. THOMPSON, SR., LECTURESHIP, May 28, 1953, St. Joseph Missouri. Mr. Guy A. Slaybaugh, Thompson, Brunner & Knepper Clinic, St. Joseph.

ANNUAL MEETING, NEBRASKA TRUDEAU SOCIETY, Omaha, June 18, 1953. William Nutzman, M.D., Kearney.

ROCKY MOUNTAIN CANCER CONFERENCE, July 8 and 9, 1953, Denver, Colorado. Mr. Harvey Sethman, 835 Republic Building, Denver 2.

IN-RESIDENCE POSTGRADUATE STUDY, Univeristy of Nebraska College of Medicine, Omaha. Daily instruction until June 20, 1953. Alumni Secretary or Public Relations Office at the College of Medicine, 42nd and Dewey Streets, Omaha.

ANNUAL ASSEMBLY, OMAHA MID-WEST CLINICAL SOCIETY, October 26-30, 1953, Paxton Hotel, Omaha. Miss Irene Rau, 1036 Medical Arts Building, Omaha.

CRIPPLED CHILDREN'S CLINICS—

April 11, Alliance, St. Joseph's Hospital
April 25, Wayne, Benthack Hospital
May 9, Ogallala, Elks Club
May 23, Ainsworth, High School
June 6, Lexington, High School
June 20, Scottsbluff, St. Mary's Hospital
July 11, Norfolk, State Hospital
July 25, McCook, St. Catherine Hospital

NEBRASKA STATE RADIOLOGICAL SOCIETY—April 15, Immanuel Hospital, Omaha; October 21, Veterans Hospital, Lincoln.

INTERIM SESSION OF THE AMERICAN MEDICAL ASSOCIATION

Denver, Colorado

December 2 to 5, 1952

DELEGATE'S REPORT

The Sixth Annual Clinical Session of the American Medical Association, which was held in Denver, Colorado, December 2nd to 5th, inclusive, was a success from every angle, according to those concerned with or participating in the overall program. Although the total and physician attendance was not as great as at some of the previous meetings, the lack in number was compensated by the keen interest of those registering for the meeting. Physicians registered numbered 2,614, of which 86 were from Nebraska. Incidentally, it might be pointed out that the number of Nebraska physicians attending the clinical and annual sessions of the American Medical Association has shown a steady gain during the past few years. It is to be hoped that each succeeding year will see an increasing number of our members in attendance, for in my opinion there is no medical meeting in the United States which can provide a greater or better general postgraduate course.

Local arrangements for this meeting were excellent, due to the untiring efforts of the officers of the Colorado State Medical Society, headed by Mr. Harvey Sethman, Executive Secretary, who worked unceasingly through interim headquarters set up at the Shirley-Savoy Hotel.

A Medical Public Relations Conference, planned and executed by Mr. Leo Brown and his efficient staff from the Public Relations Department of the American Medical Association, was held Sunday, November 30th. Over 400 registered for this session, which was described by those in attendance as being one of the best conferences held to date by this group.

The scientific program was excellent and again well attended. This program, along with the 60 scientific exhibits and the 140-odd technical exhibits, provided all with a most varied and up-to-now offering of medical subjects. A jam-packed audience filled the Municipal Auditorium for the meeting which was thrown open to the public. The program was broadcast via television and radio, and from reports received at AMA headquarters it is apparent that this informational meeting had not only the endorsement of physicians who listened in but a great appeal to laymen as well. Dr. John Mastin Travis of Jacksonville, Texas, was presented the General Practitioner of the Year Award at this meeting.

The House of Delegates had an overloaded agenda, necessitating a full day's meeting December 2nd, another session the next evening and a full day's meeting the following day, not adjourning sine die until 4:05 p.m. Thursday, December 4th. It is impossible to take up in this report the many problems having to do with the economics and practice of medicine which came before the House for discussion and action, and therefore only those matters which in the opinion of your delegate have a direct bearing on the constituent associations and their functions will be mentioned.

Dr. Karl S. J. Hohlen was Chairman of the Reference Committee on Credentials, and with the able aid received from his committee members, did a splendid job. At the first session of the House 177 delegates registered. At the Thursday session 188 delegates out of a possible 190 were present.

Speaker of the House James R. Reuling rendered under the head of "Remarks" valuable suggestions regarding House procedure. For the first time in the history of the House, delegates were seated behind tables, which were most helpful not only from the standpoint of taking notes but especially as to comfort.

President Louis H. Bauer gave a masterful address in which he expanded on "certain things that must be done if we are to preserve our American system of medicine." These points had to do with (1) the better distribution of physicians; (2) available care for all indigents; (3) extended public health coverage; (4) care of the chronic invalid; (5) expansion of the voluntary insurance programs (6) disciplining physicians for unethical practices; (7) twenty-four-hour service by physicians for the ill (8) revitalization of county medical societies; (9) the members to be leaders in their communities in all health matters and (10) the inculcation of the newly trained physicians in the traditions and ethics of medicine. It might be added that point number six, disciplining physicians for unethical practices, came in for a considerable amount of discussion before reference committees and the House in general session because of the many resolutions condemning unethical practices that had been presented by members of the House of Delegates. Some of these as well as resolutions having to do with the Code of Ethics and the report from the Judicial Council were referred to the Reference Committe on Miscellaneous Business, on which Yours Truly served. It was brought out that there will be a complete revamping of the Code of Ethics by the Council on Constitution and By-Laws, with the idea of an improved meshing of the Code and the Constitution and By-Laws, especially as one relates to the other.

With regard to the Doctor Draft Law, Doctor Bauer stated "In supporting the passage of Public Law 779, we specifically objected to calling physicians in larger numbers than would be needed to provide the necessary medical needs of the armed forces. We still adhere to that position and we feel that this stand is in the public interest." This particular problem, along with those associated with the Veterans Administration and the care of veterans, were given more time and discussion during deliberations of the House than any other matters. Many were heard on these subjects, including Dr. Norman R. Booher, representing the American Legion, Admiral Joel Boone of the Veterans Administration, and a special committee which had been appointed previously to study these problems. Precipitous action was avoided when the House of Delegates, deciding that sufficient information on the matters involved was not at hand, recommended that a special committee be appointed which would collaborate with the American Legion and kindred organizations in investigating more completely not only the main issues involved but their facets as well. The following were appointed to this committee by the Board of Trustees and named by Dr. Dwight Murray, Chairman — Drs. Edward Hamilton, Walter Martin and James McVay, members of the Board of Trustees, Dr. Louis Orr and J. D. McCarthy.

At this point Doctor Murray also announced in behalf of the Board that the American Medical Association was making its third contribution of $500,000 to the American Medical Education Foundation, as well as $10,000 to the Committee on Careers of Nursing.

The House went on record as supporting the Reed-Keogh Bill or similar legislation relative to retirement pension plans for self-employed individuals, which, of course, would include physicians. Constituent societies were urged to vigorously support the bills which will come before Congress during 1953 covering this all-important plan.

In that there has been considerable controversy relative to the name by which committees or councils hearing complaints relative to ethics would be known, a resolution calling for a change in name from "Grievance Committee" to "Professional Relations Committee" was disapproved by the Reference Commtitee on Miscellaneous Business and the committee's recommendation was adopted unanimously by the House of Delegates.

A resolution which was adopted during the regional meeting of the Legislative Committee of the American Medical Association held in Omaha last November, having to do with international treaties and covenants, was presented to the House of Delegates by Dr. Willard A. Wright, delegate from North Dakota. This resolution was referred to the Committee on Legislation and Public Relations, which recommended approval. This recommendation was concurred in unanimously by the House of Delegates.

All councils and special committees rendered comprehensive reports of the work done by these respective groups during the year.

The Council on Scientific Assembly reported that plans for the annual session of the American Medical Association which will be held in New York City June 1 to 5, 1953, inclusive, were rapidly rounding into shape. The 1953 clinical session which will be held in St. Louis, the annual meeting of the American Medical Association for 1954 will be held in San Francisco and the clinical session in December at Miami, Florida. Atlantic City will be host to the annual meeting in 1955. Your delegates are definite in their opinion that much was accomplished for the profession as a whole by the deliberations and actions of the House of Delegates during the clinical session held in Denver, Colorado, last December.

Respectfully submitted,

J. D. McCARTHY, M.D.,
Delegate.

ANNUAL AUDIT AND COMMITTEE REPORTS, 1952

The following audit and committee reports were presented to the Board of Councilors of the Nebraska State Medical Association at its mid-winter meeting, February 22, 1953, and were ordered published in the Journal:

Report of Secretary-Treasurer
Audit, Year Ended December 31, 1952
Report of Executive Secretary
Report of Board of Trustees
Report of Delegate to the North Central Conference
Editor's Report
Report of Industrial Health Committee
Report of Committee on Atomic Injuries
Report of Cancer Committee
Report of Cardiovascular Committee
Report of Venereal Disease Committee
Report of Cerebral Palsy Committee
Report of Diabetes Committee
Report of Committee on Hospital and Professional Relations
Report of Planning Committee
Report of Public Health Committee
Report of Public Relations Committee
Report of Rural Medical Service Committee
Report of Tuberculosis Committee
Report of Committee on Uniform Fee Schedule and Advisory to Governmental Agencies
Report of Mental Hygiene Committee

REPORT OF SECRETARY-TREASURER

As has been usual for a number of years, 1952 was a prosperous year with the Nebraska State Medical Association. Much good work was continued from the previous year and also some new projects were completed. Nineteen hundred fifty-two ended with the association having 1,214 members which was a gain of 14 over 1951. Seventy new members were added to the membership; 18 members died, and 20 non-members passed away, making a total of 38 doctor deaths in the state. Also, 52 doctors moved to other states.

Most of our committees did good or excellent work. As usual, some of them did none. The committees to be complimented for their efforts are as follows: Emergency Medical Service, Hospital and Professional Relations, Medical Service, Medicolegal Advice, Planning, Public Relations, Rural Medical Service, Scientific Assembly, Speakers Bureau, Uniform Fee Schedule and Advisory to Governmental Agencies, Cancer, Cardiovascular, Diabetes, Industrial Health, Maternal and Child Health and Public Health. The committees on Mental Hygiene and Venereal Disease also did what work there was for them to do. In addition, an interim Medical Education Committee was created by the president. This committee studied the conditions and needs of The University of Nebraska College of Medicine. The committee found that the needs had become a serious emergency. In order to definitely develop a plan for the medical school, each member of the committee visited one medical school in an adjoining state, studied their set-up, and reported back to the committee. From this series of reports and after conferences with the University of Nebraska Board of Regents, a plan was set up which was presented to the legislature, and the secretary thinks there is good grounds for believing that the plan will be adopted.

Details of the other committees' work will not be mentioned in this report because a detailed account will be found in the report of each committee.

The Annual Session of the Nebraska State Medical Association was held in Lincoln, May 12-15, 1952. The scientific program was one of our best, and while not as good as it should be, the attendance at this session was much better than a few years ago. The secretary believes that the increase in attendance is due to the type of program given and to the quality of the guest speakers; also, the House of Delegates under the direction of its new speaker functioned much better and used up less time. In no case did it interfere with the general sessions. The commercial exhibits were up to their usual standards, and due to lack of space, it was not possible to accommodate all who wished to exhibit.

One further fact that should be mentioned is the creation of a trust fund to handle future investments. The House of Delegates voted an increase in the annual dues of $5.00 a year per member for three years so that the association's reserve would equal one year's expenditures. This amount is considered the proper amount to have as a reserve to make the association secure in case of a disastrous year. This trust fund is set up by and taken care of by The First Trust Company of Lincoln. It handles the fund in conjunction with the Board of Trustees of the Nebraska State Medical Association.

The auditor's report, which is the Treasurer's Report, follows. Since there is nothing unusual in the report and since everything is in proper balance, the secretary does not believe it worth while to take it up in detail.

Respectfully submitted,
R. B. ADAMS, M.D.

AUDIT, YEAR ENDED DECEMBER 31, 1952

Lincoln, Nebraska,
January 26, 1953

Nebraska State Medical Association
Lincoln, Nebraska

Gentlemen:

We have examined the books and records of the Nebraska State Medical Association for the year 1952, and submit herewith our report. Included in the report are the following exhibits and schedules:

Exhibit A—Analysis of Fund Balances, January 1, 1952 to December 31, 1952.

Exhibit B—Statement of Receipts and Disbursements, Year 1952.

Schedule B-1—Statement of Receipts and Disbursements, Annual Session, Year 1952.

Schedule B-2—Comparison of General Expense with Budget, Year 1952.

Exhibit C—Statement of Investments, January 1, 1952 to December 31, 1952.

Exhibit D—Journal Accounts Receivable, December 31, 1952.

EXHIBIT A

Exhibit A is the analysis of fund balances. During the year 1952 there was an increase in the balances of $7,517.00. The total balance on December 31, 1952 was $43,893.23, and was represented by cash in the National Bank of Commerce, Lincoln, Nebraska, of $11,860.99 and investments of $32,032.24.

EXHIBIT B

The details of the changes in the operating fund cash balance are shown in Exhibit B. In this statement the incomes and expenses have been divided into four classifications. Under the heading of General Income the principal items are membership dues of $34,230.00 and income from annual session of $7,214.50. Interest collected on U. S. Government Bonds amounted to $463.13.

The chief item of income for the journal during the year was advertising of $15,165.44. Cash received for the American Medical Association dues of $27,900.00 was remitted to that Association as shown under other disbursements in this statement. Funds in the amount of $2,500.00 were received from the Cancer Society to be used to conduct postgraduate courses. Total cash received during the year amounted to $88,611.49.

In addition to the total receipts shown, $1,000.00 was received from the Nebraska Heart Association and $1,000.00 from the Nebraska Tuberculosis Association for postgraduate meetings. Of this amount $1,212.88 was paid directly to speakers at the time of the meetings. The Association retained $489.78 to cover Speakers Bureau expenses and returned the balance of $297.34 to the Heart and Tuberculosis Associations. This information was brought to our attention from the records of correspondence between the Associations and except for the portion used for Speakers' Bureau expenses, the receipt and expenditures were not recorded on the books of the Association.

The disbursements of the Association are divided into the same classifications as the receipts. The total amount of general disbursements was $35,226.47. A comparison of these items with the budget items approved for 1952 is shown in Schedule B-2. Journal expenses for the year totaled $16,174.12 and other disbursements were $35,101.93. This amount included American Medical Association dues of $27,900.00, stocks purchased for investment $5,107.82, and expenses for postgraduate courses for the Cancer Society $1,604.33. The total disbursements during the year were $86,502.52. The excess of receipts over disbursements amounted to $2,108.97 and cash on hand at the close of the year was $11,860.99.

EXHIBIT C

The changes that occurred in the investment account during the year are shown in Exhibit C. The value of the investments at the beginning of the year was $26,624.21. During the year there was a total addition in investments of $5,408.03. Stock at a cost value of $5,107.82 was purchased. Dividend credits in building and loan accounts amounted to $132.44. The increase in value of the United States Savings Bonds during the year was $166.77. The total value of the investments on December 31, 1952 was $32,032.24.

EXHIBIT D

Exhibit D is a list of the journal accounts receivable. Our examination of the accounts receivable record indicated that the greater part of these accounts are amounts receivable for advertising during the month of December, 1952. This record also indicated that with few exceptions these accounts are being paid currently. As the Association operated on the cash basis, these items are not taken into income until cash is received.

Mr. M. C. Smith, Executive Secretary of the Association, has in his possession a fund of $100.00 to be used for traveling and other Association expenses. This fund is replenished periodically upon his presentation of expense reports, and is not carried on the books of the Association as an asset.

There are additional funds of $1,000.00 in cash kept in the Association's safety deposit box at the National Bank of Commerce, Lincoln, Nebraska. This amount was verified by actual count at the time of the examination of securities, and is not set up on the books as an asset. The purpose of this fund is to defray expenses of the Association, and to date none of it has been used.

All receipts for the year were traced through the books and into the bank account. In addition, test checks were made of letters of transmittal tracing the items to the individual members' accounts. An inspection of the members' unused cards in connection with our examination of the receipts indicated that all cards issued to members during the year were accounted for on the books of the Association. It was also found that during the year 1952 cards were issued to 28 military members and 47 life members, for which no dues were collected.

Cancelled checks for the year were inspected and compared to the items in the check register. Invoices and creditors' statements were examined covering the greater portion of the disbursements. Minutes of the trustees' meetings during the year were examined in regard to authorization of salaries, budgets and other disbursements. The balances shown as cash in bank were confirmed by direct correspondence with the depositories.

Our audit also included an inspection of securities owned by the Association at the close of the year. Balances in savings and loans accounts were confirmed by correspondence.

Subject to the foregoing comments, it is our opinion that the attached statements present fairly the financial position of the Association at December 31, 1952, and the operations for the year then ended. Should any additional information be desired concerning any matters falling within the scope of our examination, we shall be pleased to supply it upon request.

Respectfully,

DANA F. COLE & CO.

EXHIBIT A:

NEBRASKA STATE MEDICAL ASSOCIATION
ANALYSIS OF FUND BALANCES

January 1, 1952 to December 31, 1952

Total Balance, January 1, 1952			$36,376.23
Represented by:			
Cash—Natl. Bank of Com.— General Fund	$8,713.30		
Cash—Natl. Bank of Com.— Cancer Fund	1,038.72	$ 9,752.02	
Investments—Exhibit C		26,624.21	
		$36,376.23	
Add: Excess of Receipts over Disbursements— Exhibit B		2,108.97	
Net Increase in Investments—Exhibit C		5,408.03	7,517.00
Total Balance, December 31, 1952			$43,893.23
Represented by:			
Cash—Natl. Bank of Com.— General Fund	9,926.60		
Cash—Natl. Bank of Com.— Cancer Fund	1,934.39	11,860.99	
Investments—Exhibit C		32,032.24	
		$43,893.23	

EXHIBIT B:

NEBRASKA STATE MEDICAL ASSOCIATION
STATEMENT OF RECEIPTS AND DISBURSEMENTS

Year 1952

Cash on Hand, January 1, 1952—				
General Fund—Cash			$ 8,713.30	
Cancer Fund—Cash			1,038.72	$ 9,752.02
RECEIPTS:				
General:				
Membership Dues		$34,230.00		
Interest Collected		463.13		
Annual Session—Schedule B-1		7,214.50		
A.M.A. Membership Expense Rebate		277.89		
Workmen's Compensation Court—Copies Fee Schedule		21.00		
Addressing Envelopes—Mailing List		5.00		
Postage Reimbursement—Prior Year		30.80	42,242.32	
Journal:				
Advertising		15,165.44		
Subscriptions		296.25		
Copies Sold		5.95		
Reimbursement for Engraving and Art Work		11.75	15,479.39	
Other Receipts:				
A.M.A. Dues		27,900.00		
Reimbursement of Speakers' Bureau Expense:				
Nebr. Heart Assn.	$244.89			
Nebr. TB Assn.	244.89	489.78	28,389.78	
Cancer Fund:				
Cancer Society for Postgraduate Courses			2,500.00	
TOTAL RECEIPTS			$88,611.49	
DISBURSEMENTS:				
General:				
Salaries and Social Security Taxes		$16,595.15		
Travel		1,174.79		
Office Expense:				
Rent		2,598.09		
Mimeograph		361.98		
Printing		345.39		
Postage		1,077.60		
Telephone and Telegraph		805.96		
Miscellaneous		346.93		
Councilor Expense		302.90		
Annual Session (Sched. B-1)		7,199.53		
Exceptional Meetings and/or Travel		3,317.34		
Audit Expense		235.00		
Medicolegal		710.19		
Office Equipment		35.00		
President's Expense		120.62	35,226.47	
Journal:				
Salaries		5,425.00		
Publication Expense		7,047.00		
Press Clipping Expense		175.07		
Color		2,390.18		
Inserts		371.88		
Cuts, Engraving, Art Work		238.10		
Single Wrapping		69.00		
Expenses—Editor		438.77		
Membership Reprints		16.62		
Subscription Refund		2.50	16,174.12	
Other Disbursements:				
A.M.A. Dues		27,900.00		
Investments Purchased		5,107.82		
Speakers' Bureau:				
Postgraduate Courses Expenses:				
Nebr. Heart Assn.	$244.89			
Nebr. TB Assn.	244.89	489.78	33,497.60	
Cancer Fund:				
Speakers—Postgraduate Courses		1,114.53		
Speakers' Bureau Expenses—Cancer Fund Share		489.80	1,604.33	
TOTAL DISBURSEMENTS			$86,502.52	
EXCESS OF RECEIPTS OVER DISBURSEMENTS				2,108.97
Cash on Hand, December 31, 1952				$11,860.99
Consisting of:				
General Fund Cash			$ 9,926.60	
Cancer Fund Cash			1,934.39	
			$11,860.99	

SCHEDULE B-1:

NEBRASKA STATE MEDICAL ASSOCIATION
STATEMENT OF RECEIPTS AND DISBURSEMENTS ANNUAL SESSION

Year 1952

RECEIPTS:		
Exhibits	$4,405.00	
Fun Night Income	1,302.00	
Banquet	1,507.50	$7,214.50
DISBURSEMENTS:		
Printing	$ 550.81	
Badges	44.45	
Exhibitors' Cocktail Party	379.60	
Booths	393.00	
Reporter	365.72	
Fun Night Expense	1,536.60	
Banquet	1,697.50	
Presidents Expense	186.74	
Guest Speakers	1,559.97	
Auxiliary—Flowers	75.00	
Miscellaneous	410.14	7,199.53
EXCESS OF RECEIPTS OVER DISBURSEMENTS		$ 14.97

SCHEDULE B-2:

NEBRASKA STATE MEDICAL ASSOCIATION
COMPARISON OF GENERAL EXPENSE WITH BUDGET

Year 1952

	Budget	Actual Expense	Unexpended Balance
Salaries and Social Security Taxes	$17,000.00	$16,595.15	$ 404.85
Travel	1,175.00	1,174.79	.21
Office Expense:			
Rent	2,600.00	2,598.09	1.91
Mimeograph	800.00	361.98	438.02
Printing	1,000.00	345.39	654.61
Postage	1,200.00	1,077.60	122.40
Telephone	1,200.00	805.96	394.04
Miscellaneous	500.00	346.93	153.07
Councilor Expense	305.00	302.90	2.10
Annual Session	7,200.00	7,199.53	.47
Audit Expense	235.00	235.00	—

Medicolegal	715.00	710.19	4.81
Attorney's Fees	1,000.00	------	1,000.00
Office Equipment	200.00	35.00	165.00
President's Expense	500.00	120.62	379.38
Exceptional Travel and/or Meetings	3,500.00	3,317.34	182.66
Expendable Supplies	400.00	------	400.00
Speakers' Bureau	980.00	------	980.00
Reappropriation	1,350.00	------	1,350.00
	$41,860.00	$35,226.47	$ 6,633.53

EXHIBIT C:

NEBRASKA STATE MEDICAL ASSOCIATION
STATEMENT OF INVESTMENTS

January 1, 1952 to December 31, 1952

Total Balance, January 1, 1952			$26,624.21
Consisting of:			
Omaha Loan and Building Assn.		$ 1,959.10	
Nebraska Central B. & L. Assn.		1,079.30	
Conservative Savings and Loan Assn.		1,615.96	
U. S. Treasury Bonds, 2⅞%		4,500.00	
U. S. Savings Bonds, Series F (Issue Price $4,458.50, Maturity Value $6,025.00)		5,307.85	
U. S. Savings Bonds, Series G		12,100.00	
Postal Savings Bonds (Issue Price $50.00)		62.00	
		$26,624.21	
Additions:			
Stock Purchased:			
100 Shares Mission Corporation (Cost)	$2,710.94		
100 Shares Wisconsin Electric Power (Cost)	2,396.88	5,107.82	
Dividend Credits:			
Omaha L. & B. Assn.	59.19		
Nebr. Central B. & L. Assn.	32.61		
Conservative Savings and Loan Assn.	40.64	132.44	
Increase in Value—U. S. Savings Bonds:			
Total Increment, 12-31-52	1,016.12		
Total Increment, 12-31-52	849.35	166.77	
Interest Accrued—Postal Savings:			
Interest Accrue, 12-31-52	13.00		
Interest Accrued, 12-31-51	12.00	1.00	
Total Additions			$ 5,408.03
Total Balance, December 31, 1952			$32,032.24
Consists of:			
100 Shares Mission Corporation stock (Cost Value)		$ 2,710.94	
100 Shares Wisconsin Electric Power Stock (Cost Value)		2,396.88	
Omaha Loan and Building Assn.		2,018.29	
Nebraska Central Building & Loan Assn.		1,111.91	
Conservative Savings & Loan Assn.		1,656.60	
U. S. Treasury Bonds, 2⅞%		4,500.00	
U. S. Savings Bonds, Series F (Issue Price $4,458.50, Maturity Value $6,025.00)		5,474.62	
U. S. Savings Bonds, Series G		12,100.00	
Postal Savings Bonds (Issue Price $50.00)		63.00	
		$32,032.24	

EXHIBIT D:

NEBRASKA STATE MEDICAL ASSOCIATION
JOURNAL ACCOUNTS RECEIVABLE

December 31, 1952

Classified Ads:	
Roland T. Smith	$ 4.00
Cheapper Drug Company	4.80
The Coca-Cola Company	20.70
Gold and Company	12.65
Midwest Orthopedic Appliance Co. (Turned over to Credit Bureau)	86.00
Paxton Hotel	20.70
State Journal Advertising Bureau	1,191.50
	$1,340.35

REPORT OF EXECUTIVE SECRETARY

The over-all activities of your association during 1952 have proceeded on about the same plane as for the year previous. Some of the contemplated projects of various committees have been completed, some have been expanded, and still other new projects have been started. Details of the activities of the various committees will be reported by the chairmen. A few of the highlights are here reported to point up something of the over-all activities.

Shortly after the Annual Session, Dr. Harold S. Morgan, President, appointed the Medical Education Committee as an interim committee to make a study of the situation at the University of Nebraska College of Medicine. Much time and effort has gone into the work of this committee. The members of this committee have visited eight different medical schools besides our own. This was done at their own personal expense. A mass of authentic material has been compiled and will be presented to the legislature in an effort to help solve a complexing problem.

This is a legislative year and the legislature is now in session. It is much too early in the session to formulate any definite pattern for health or medical care legislation. The Medical Service Committee has been having meetings and studying legislation which is of interest to the medical profession.

The Public Health Committee has been very active during the past year. Plans are now going forward to produce a short movie which will graphically portray public health matters as they now exist in the state. This movie will be made in cooperation with the Nebraska Medical Foundation and the University of Nebraska. It will be purely educational and will be widely distributed over the state.

The Public Relations Committee has carried on an active radio program in the state. The broadcasting stations have been more than cooperative in this educational effort. Twenty of the twenty-two stations in the state have carried these programs. With few exceptions the series have been accepted and used on a public service basis. Program series on platters from the American Medical Association Bureau of Health Education have been used. Forty-nine series were broadcast during the year. There are 13 fifteen-minute programs in each series. This totals a little more than 159 hours of broadcasting time during the year. Included in many other activities, the Public Relations Committee has produced a folder containing the names of all insurance companies in Nebraska engaged in selling health and accident insurance. Figures are given indicating the total premiums collected, the amount paid to policy holders, indicating the per cent of premium which is returned to the policy holder. This information is placed in the hands of the members to be used in discussing good insurance policies with their patients.

One of the outstanding accomplishments for the year was the Senior Medical Day established by the Rural Medical Service Committee. The senior class of the Creighton University School of Medicine and the University of Nebraska College of Medicine were invited to a program designed to acquaint the students with many of the problems they will meet in the practice of medicine. The main theme is to point out many of the advantages of rural practice. The meeting has been established as an annual event.

The newly formed Committee on Uniform Fee Schedule and Advisory to Governmental Agencies has spent many hours in conference and working with other groups to prepare a workable drug formulary. The job has been completed and is now in the process of being printed. This monumental job will no doubt be recognized on the same basis as the fee schedule which has received universal adoption.

These are only a few of the highlights of the activities of your association for the past year. The various committees have held 28 formal meetings during the year. All of the committee work centers in the headquarters office. One or more of the headquarters staff attends all committee meetings to keep records of the meetings and to assist in any other way possible. Copies of the minutes of all committee meetings are sent to the officers of the association, all committee chairmen, and to secretaries of all component medical societies in order that all members are kept well informed of all activities. Copies are sent to secretaries of component societies with the hope that they are read and presented for discussion at all county society meetings.

During the past year a monthly average of approximately 4,500 pieces of incoming and outgoing mail was handled through the headquarters office.

RELOCATION BUREAU

During the past year the relocation bureau has received national acclaim as an efficient operating unit after a complete investigation by the Medical Service Committee of the American Medical Association. Our method of operation is comparatively simple, which, no doubt, contributes considerably to its efficient operation. At present there are 32 towns listed in our file that have asked for help in locating a doctor. We have the names of 17 physicians who have indicated that they are interested in locating in Nebraska. In addition, we have the names of 24 practicing physicians who are looking for associates, or someone to assist them in their practice. Your headquarters office acts as a clearing house, making this information available to interested parties. We take no part in final arrangements or contracts that might be made.

AMERICAN MEDICAL EDUCATION FOUNDATION

One of the finest records in the country was established during the past year in the activities of the American Medical Education Foundation. This foundation was established to collect contributions from the members of the medical profession to be used in medical education. In 1951 the contributions from Nebraska were negligible. Early in 1952 Dr. L. D. McGuire of Omaha accepted the appointment to take charge of this activity in Nebraska. He rented an airplane with his own private funds and flew to all parts of the state. The value of this activity was enthusiastically presented to the county societies and individual physicians all over the state. As a result of the work of Doctor McGuire, the individual contributions of cash and pledges for the year amounted to approximately $82,525.00. This is certainly an enviable record. Doctor McGuire was honored at a national meeting in Chicago held by the American Medical Association in January for this outstanding accomplishment.

THE NEBRASKA STATE MEDICAL JOURNAL

Our journal has shown a loss for the past four years due to increased costs of printing; however, along with other state medical journals, a rate increase of approximately 45 per cent was put into effect at the beginning of the year. This rate was about equal to the increased printing costs which had been made over a period of years. We anticipated a loss in advertising pages because of this raise, and while this loss did occur, it was less than we anticipated. The increased revenue has about evened our costs. The over-all advertising revenue for 1952 was $15,165.44 as compared with $13,029.93 in 1951; however, we carried 54 fewer pages in 1952. Thus, The Nebraska State Medical Journal for the past year will carry its own expense. The Huse Publishing Company has asked for a slight increase in printing costs for the coming year. This increase is approximately 3 per cent. The Board of Trustees has approved a new printing contract on this basis, since the raise appears to be very reasonable and fair when compared with the general rising costs in the printing industry.

MEMBERSHIP

Following are the usual membership tables, giving the state of membership at the close of 1952. Some observations regarding our membership might be of interest to the members. Our records indicate that we have 70 new members for the year 1952. There were 18 members and 20 non-members who passed away during the year. Fifty-two doctors moved out of the state. The year closed with a total membership of 1,214, the second highest membership which the association has ever had. The highest membership was in 1926 with 1,220 members, indicating that we are now within 6 members of the all time high. It is also interesting to note that the median age of Nebraska physicians is 52.8 years.

TABLE NO. 1

Members deceased	18	
Non-members deceased	20	38
Members moved out of state	44	
Non-members moved out of state	8	52
		90
New physicians in state—members	70	
Potential members	40	110
Net Gain		20
In active practice		1,428
Retired but eligible		34
Members—December 31, 1951		1,200
December, 31, 1952 (one paid, Jan. '53)		1,214
Gain in Membership		14

TABLE NO. 2

Licensed Physicians (last file count—Bureau of Examining Boards)		2,315
Residing out of state	793	
Members (36 out of state)	1,214	
Non-eligible	38	
Retired	34	
Non-members, eligible	201	
Associate members	24	
Unaccounted for (home address, etc.)	11	2,315

TABLE 3

Members:		
Active (1 paid in January, 1953)	1,090	
Life (5 in deceased column)	42	
Service	28	
Out of state	36	
Deceased (5 Life)	18	1,214

It is most fitting to close this report as so many previous ones have been closed by a word of appreciation from the Executive Secretary and the headquarters staff for the fine cooperation we have received from the officers, committees, and members of the association. We have reason to be proud of the acomplishments of the Nebraska State Medical Association. These accomplishments are only made possible by willingness of the members to be a part of a closely knitted and well working group. Working together we can look forward with confidence to greater accomplishments in 1953.

Respectfully submitted,

M. C. SMITH,
Executive Secretary.

REPORT OF BOARD OF TRUSTEES

Earle G. Johnson, M.D., Chairman, Grand Island; G. E. Peters, M.D., Randolph; J. E. M. Thomson, M.D., Lincoln; Fay Smith, M.D., Imperial; R. B. Adams, M.D., Lincoln.

The Board of Trustees of the Nebraska State Medical Association held four regular meetings during 1952 as prescribed by the Constitution and By-Laws. All members were present at three of the meetings. No special meetings were held.

FINANCIAL REPORT

The auditor's report, which is submitted at this meeting, gives a detailed and accurate account of the financial operations for the past year. We should like to suggest this report as recommended reading for all members. It will be published in an early issue of the official journal. The auditor's report indicates that your association is in good financial condition. During 1952 we operated well within the approved budget.

In our report last year we indicated that the board was considering a change of policy for our investments, due to the fact that present inflationary trends had cheapened the value of our reserves which have all been held in government bonds. A committee consisting of Drs. J. E. M. Thomson, G. E. Peters and D. B. Steenburg was appointed to investigate the investment policies of other organizations with problems similar to our own. Upon the report and suggestions of this committee, your Board of Trustees reached a decision to set up an investment management service with the First Trust Company, Lincoln, Nebraska. Mr. J. C. Whitten, Vice President of the First Trust Company, attended the meeting of the board on October 11, 1952, and outlined the details of this type of management service. Mr. Whitten presented a contract which was accepted and approved by the board. On October 14, 1952, the First Trust Company was authorized to purchase 100 shares of Mission Corporation and 100 shares Wisconsin Electric Power Company for this account at a cost of $5,107.82. It is contemplated that future investments of the association will be made in this trust account, retaining part, or all, of our present holdings of government bonds as a balancing factor in our investment portfolio.

The Board of Trustees reported to the House of Delegates at the May 1952 session that our reserve account was low in comparison to the increased activities of the association resulting in an increased budget and total annual expenditures. Good association management recommends that an amount approximately equal to one year operating cost should be carried as reserve. The House of Delegates voted an increase in dues of $5.00 per year for a period of three years. This sum is to be earmarked for reserve and not used for current operating expenses. This $5.00 per member has been set aside on the books of the association and will be transferred to the investment management fund and invested in common stocks.

JOURNAL CONTRACT

The printing contract for the journal expired in 1952. The Huse Publishing Company has printed our journal since it started in 1916. Mr. F. C. Asmus presented cost and operating expenses of printing our journal and asked that the new contract be written on the basis of an increased cost of approximately 3 per cent. The board has felt that the Huse Publishing Company has been very fair in the increases requested during this period of rising costs. A check of rising costs in the printing industry for the past year indicates the increase asked for was more than reasonable. A new contract was completed on this basis.

PROJECTS FINANCED

During the past year the Public Health Committee has been contemplating a project of producing a short movie in conjunction with the Nebraska Medical Foundation and the University of Nebraska. This movie is to cover actual existing public health conditions in Nebraska. The Public Health Committee requested $1,000.00 to carry out this project. Your Board of Trustees felt that this was a worthy educational project and made the sum of $1,000.00 available to be used by the committee.

The Woman's Auxiliary presented a request for funds to be used to prepare some radio platters for nurse recruitment. An allowance of $50.00 was made for this purpose.

BUDGET FOR 1954

Upon motion, the following budget for 1954 is presented to the Board of Councilors with the request that it be recommended to the House of Delegates:

BUDGET 1954

Salaries and Social Security	$20,000.00
Travel	1,000.00
Office:	
Rent	2,600.00
Mimeograph	500.00
Printing	750.00
Postage	1,200.00
Telephone and Telegraph	1,200.00
Miscellaneous	500.00
Annual Session	5,000.00
Council Expense	3,000.00
Exceptional Meetings and/or Travel	3,000.00
Audit	250.00
Dues, Share to Journal	3,000.00
Attorneys Fees	1,000.00
Office Equipment	200.00
President's Expense	500.00
Speakers Bureau	500.00
Expendable Supplies	1,000.00
Reappropriate from Unexpended Balance	4,000.00
Total	$46,500.00

A motion was made and seconded also that the 1953 budget be amended to correspond with the 1954 budget. This motion carried and the Board of Trustees asks that it be so recommended to the House of Delegates.

Respectfully submitted,
EARLE G. JOHNSON, M.D.,
Chairman.

REPORT OF DELEGATE TO THE NORTH CENTRAL CONFERENCE

The North Central Medical Conference was held this year on November 16, 1952, at the Hotel Radisson in Minneapolis, Minnesota. Those attending the meeting thought that the program afforded much of interest to the medical profession. A total of approximately one hundred delegates and members registered, including physicians and medical personnel from North Dakota, South Dakota, Iowa, Nebraska, Wisconsin and Minnesota.

Conferences in which each of the several states represented were held covering the following subjects:

1. Nursing and the nursing problem.
2. Selective Service and the drafting of physicians.
3. Veterans' medical care.

Speakers from all states expressed the common opinion that there was an acute shortage of nurses. Cause of this shortage could be discussed at length. It is quite evident to most of us that the solution is most difficult. Several groups are involved in this problem. It was felt that if a concerted effort could be made to get hospital groups, nursing groups, and medical groups to cooperate on this question, its solution could be brought about.

As to Selective Service, and the drafting of physicians, Public Law No. 779, which went into effect on September 9, 1950, and which provides the classification into four priority groups, will expire on June 30, 1953, unless Congress repeals it or passes another law in its place. This question was discussed at length by representatives from the several states. It seems that in certain rural areas there is already a definite shortage of physicians, and the drafting from these areas tends to bring a considerable hardship to the community. It seemed to me that the concensus was that the law was not working too badly and that in all probability it would need to be continued much as it is.

Veterans' medical care was discussed at considerable length and with considerable heat. The fact that approximately 90 per cent of the patients in veterans hospitals are in for non-service-connected illness bespeaks the failure of the Veterans Administration to comply with the law, which provides that such cases be unable to pay. Also, the enormous building program which has been carried on by the Veterans Administration when there are, apparently, many beds unoccupied, was subject to criticisms. While this question was discussed at length, there seemed to be no solution for it except that it is being dealt with by the American Medical Association.

The Tennessee Plan was discussed. This plan would provide that all veterans be provided with a health and accident insurance policy paid for at government expense. The many dangers of the government entering into the insurance business and providing medical care were discussed. Such a plan would make an excellent opportunity for the government to enter into full, or at least extended participation in providing medical care.

FLOYD L. ROGERS, M.D.,
Lincoln.

EDITOR'S REPORT

The following report on The Nebraska State Medical Journal for the year 1952 is respectfully submitted for your consideration:

Volume thirty-seven of The Nebraska State Medical Journal for the year 1952 consists of 412 pages of printed material, plus the advertising section. More than one-half of these pages are occupied by scientific articles. Seventy-two scientific articles were published and occupied 223 pages.

The subjects covered in the scientific material were varied and represented many fields of medicine and closely related subjects. It is difficult to classify this material accurately but those which could be included in general medicine numbered twenty-two; eleven were of a general surgical nature; the surgical specialties such as orthopedic and urologic were represented by six articles. Pathology, clinical pathology, neuropsychiatry, obstetrics and gynecology, were each represented by one or more papers. There were several papers on general subjects and on technical matters, such as the transmission of the electrocardiogram over ordinary telephone lines.

There were twenty-six editorials published in this volume. These occupied a little more than fifty pages. Five of them were guest editorials. Your president used this medium on two occasions. He had the privilege of doing so at any time, since he preferred this to the customary President's Page.

The remainder of the 412 pages contained so-called organization material which consisted of News and Views, Human Interest Tales, Announcements, Deaths, Blue Shield Information, Woman's Auxiliary news, etc.

There are no new projects in view for the present. There is an attempt being made to set up a column dealing with the interesting news from our two medical schools. The result of the first effort along this line appeared in the January issue. Whether this will crystalize into something interesting and instructive to the readers remains to be seen.

You have all had an opportunity to see the new cover. It seemed to us that the Nebraska State Capitol is one of the most artistic, beautiful, distinctive and widely known buildings in our land and that its use as a background on the cover of our journal adds further distinction to an otherwise fine scientific organ. We hope this will meet with the approval of the Board of Councilors and the membership.

You have noted, no doubt, that we have changed back to a two-column title for the scientific articles. This seems to set off the beginning of a new paper in such a way that one may justifiably begin a new subject nearer the bottom of a page without appearing to give the article a minor position. This saves space and minimizes the amount of filler that has to be used.

The short summary of the paper placed at the beginning of each article by the editor has been complimented by many because it helps the reader decide whether the content of the article is what he wants to read in detail at that time.

It is to be hoped that your journal pleases you and that any ideas you may have for its improvement will be freely communicated to us.

One of the most difficult jobs of the editor has been to get the stenotyped copies of the fine material presented at the Annual Session exchanged for printable articles. If you have not thought of this point, I hope you give it your attention. Stenotyping is expensive. A guest speaker from Boston, from Texas, or elsewhere, is costly. The speaker makes a good talk and shows a lot of lantern slides. The stenotypist takes down all that he says and does it perfectly. The essayist's English, his construction, his grammar, and his punctuation are abominable. He may have from five to twenty-five slides. He says "this slide shows this" and "this one that." The stenotyped copy has no slides and no illustrations. It requires many letters from me to him, and vice versa, to get a manuscript and this is accomplished in only about half the instances. You can readily see the wastage in this process. A few members of the association hear the talk, the rest do not. Even those who hear it probably would like to read it later.

I can see only one answer for the correction of this waste of money and loss of excellent material for The Nebraska State Medical Journal; namely, to require each speaker to deliver a manuscript properly prepared and illustrated before he is permitted to speak to the asssembly. If we can not get the manuscripts, there is no point in paying a stenotypist to make an unuseable transcript of the presentation. The editor may enjoy reading the stenotyped copies, but he can not print them. This is my one recommendation.

Respectfully submitted,
GEO. W. COVEY, M.D.,
Editor.

REPORT OF INDUSTRIAL HEALTH COMMITTEE

G. P. McArdle, M.D., Chairman, Omaha; Robert Hillyer, M.D., Lincoln, E. J. Kirk, M.D., Omaha.

Our first meeting of October 13, 1952, brought forward many proposed projects. The first, and foremost, agreed upon by the Industrial Health Committee was an Industrial Health Conference to be held the middle of February 1953, co-sponsored by the Omaha Chamber of Commerce. Such a conference has been held in several states with very much success and is widely accepted by management, labor, and the various state medical associations. To date this has progressed to the point of a reasonable surety, and we will be able to report more fully in the spring.

Other activities of the committee:

Possible Standing Orders for Nurses.

V. D. Detection—There being a state law prohibiting the employment of food handlers who have contagious or venereal disease; this law now being under the Department of Agriculture:

> It is suggested that this law be transferred to the Department of Health; and it was further recommended that said suggestion be turned over to the proposed State Board of Health in the spring.

A third possibility for the committee to follow would be a conference between our committee and the Academy of General Practice, thereby making better acquaintance or relationship between general practitioners and the men who indulge in industrial practice in the State of Nebraska. To date, this report about covers our activities.

Respectfully submitted,
G. P. McARDLE, M.D.,
Chairman.

REPORT OF COMMITTEE ON ATOMIC INJURIES

Howard B. Hunt, M.D., Chairman, Omaha; J. M. Neely, M.D., Lincoln; G. R. Underwood, M.D., Lincoln.

The activities of this committee have ceased during the past year. The general pattern of medical care has been taken over by the Medical Committee of Civil Defense Organization under Dr. Roy Whitham. The recommendations of this committee have been largely implemented through the office of the Department of Health, State Capitol, under Dr. E. A. Rogers. It would seem to me that this committee might be dissolved since responsibilities have been taken over by the Department of Health and the Medical Committee of the Office of Civil Defense at Lincoln, Nebraska.

Respectfully submitted,
HOWARD B. HUNT, M.D.,
Chairman.

REPORT OF CANCER COMMITTEE

James F. Kelly, M.D., Chairman, Omaha; John T. McGreer, M.D., Lincoln; Burton R. Bancroft, M.D., Kearney.

There has been no change of great significance in the policy, or procedures, of the Cancer Committee during the last year. The Cancer Drive again collected near its quota and from some of the money remaining in the state, it was possible for the Cancer Society to carry on a very effective educational program.

The Cancer Research and Educational Society continues to operate Tumor Clinics throughout the state. The new headquarters for the Cancer Research and Educational Society at 42nd and Dodge Streets, Omaha, is functioning very well. It is very handy and its operation costs but very little.

The Cancer Committee feels that about everything is being done for both lay and professional education in the State of Nebraska that the available budget will permit. The Nebraska Division of the American Cancer Society has made very definite progress in organizing its lay workers throughout the state and great credit must be given to Mrs. T. L. Houlton and Miss Carol Feuerstein and all of the other part-time workers for bringing this organization to a degree of cooperation which has enabled the Nebraska Division of the American Cancer Society to make its national quota during the last two years.

The Nebraska Division of the American Cancer Society also contributed $2,500.00 to the Nebraska State Medical Association to defray the expenses of the speakers on Cancer who took part in last year's refresher courses. This series of six days of lectures in various parts of the state was a very fine undertaking and supplemented the educational program on Cancer carried out by the Nebraska Cancer Research and Educational Society in the tumor clinics.

Another grant of a little over $1,000.00 from the Nebraska Cancer Research and Educational Society was given to the Nebraska State Dental Association for a refresher course. Donald T. Waggener, D.D.S., Lincoln, is a director of the cancer program at the University of Nebraska College of Dentistry.

A grant of $5,000.00 was again donated by the Nebraska Division of the American Cancer Society to each medical school for use in Cancer.

A Cancer Symposium at the annual meeting of the Society was very well received.

The Cancer Committee wishes to thank the other officers and committees of the Nebraska State Medical Association for their cooperation and aid during the past year.

Respectfully submitted,
JAMES F. KELLY, M.D.,
Chairman.

REPORT OF CARDIOVASCULAR COMMITTEE

O. A. Kostal, M.D., Chairman, Hastings; C. Q. Thompson, M.D., Omaha; F. W. Niehaus, M. D., Omaha.

The Cardiovascular Committee has engaged in the following activities:

1. A close continuous cooperation with the Nebraska Heart Asociation, an affiliate of the American Heart Association. On January 2, 1953, a letter was sent to all component county medical societies requesting that each member of the society give his support to the National Heart Campaign of the American Heart Association February, and that the societies aid local lay organizations in promoting educational programs. It was also recommended that the county medical societies feature cardiovascular disease as the theme for programs in January and February.

2. The February issue of The Nebraska State Medical Journal will again be devoted to cardiovascular disease.

3. Support was given to the postgraduate program sponsored by the Speakers Bureau Committee in November 1952.

Respectfully submitted,
O. A. KOSTAL, M.D.,
Chairman.

REPORT OF VENEREAL DISEASE COMMITTEE

L. W. Lee, M.D., Chairman, Omaha; J. H. Barthell, M.D., Lincoln; O. J. Cameron, M.D., Omaha.

The main activity of the Veneral Disease Committee this year had to do with framing the "New Policy on Management of Indigent Venereal Disease Patients," a complete report of which appeared in The Nebraska State Medical Journal October 1952. A change in policy was made necessary by discontinuing the rapid treatment center at the Omaha-Douglas County Hospital on June 30, 1952. The new plan provides for out-patient treatment of indigent venereal disease patients in the offices of private physicians throughout the state. The plan was proposed and presented to the House of Delegates in May 1952, and was unanimously approved.

Respectfully submitted,
L. W. LEE, M.D.,
Chairman.

REPORT OF CEREBRAL PALSY COMMITTEE

L. S. Campbell, M.D., Chairman, Omaha; L. J. Gogela, M.D., Lincoln; C. F. Ferciot, M.D., Lincoln.

The Cerebral Palsy Committee of the state association has held two regularly scheduled meetings during 1952. One of these meetings was held on October 10, 1952, and was also attended by members of the Board of Control, State Capitol. The Superintendent of the Orthopedic Hospital in Lincoln and the Director of the Services for Crippled Children were also present at this meeting.

Since this committee's last report to you one year ago, the Cerebral Palsy Unit at the Nebraska Orthopedic Hospital has been established and has continued to function up to the present time. Although facilities were available, it was this committee's feeling that an insufficient number of these handicapped children had been treated considering the length of time the unit had been in operation. Consequently, the committee again met on January 12, 1953, in an effort to formulate a specific resolution to be sent to the Board of Control to better integrate the care of the Cerebral Palsy patient for in-patient care in the Orthopedic Hospital in Lincoln. Dr. Fritz Teal as Chief of Staff of the Orthopedic Hospital was in attendance at this meeting in addition to committee members. The following resolution was adopted and forwarded to the Board of Control by committee members present. This resolution read as follows:

> THEREFORE BE IT RESOLVED, This committee recommends to the Board of Control that the unit method of appropriation for the Cerebral Palsy Unit be abandoned and that future appropriations for this purpose be made a part of the general appropriations for the Orthopedic Hospital, and
>
> BE IT FURTHER RESOLVED, That the Cerebral Palsy Committee recommends that the care of cerebral palsied children in the Orthopedic Hospital be delegated to a newly established Cerebral Palsy Service, and
>
> BE IT FURTHER RESOLVED, That the concepts as previously outlined by this committee for the care of cerebral palsied children be faithfully carried out in the new service, and
>
> BE IT ALSO FURTHER RESOLVED, That the Board of Control take immediate steps to reorganize the administration of the Orthopedic Hospital to whatever extent is necessary to fulfill the spirit of this resolution.

It is the opinion of this committee that if the above outlined resolutions be adopted by the Board of Control much, if not all, of the previously existing opposition and red tape to the functioning of this in-patient program will be overcome.

Respectfully submitted,
L. S. CAMPBELL, M.D.,
Chairman.

REPORT OF DIABETES COMMITTEE

Morris Margolin, M.D., Chairman, Omaha; Floyd L. Rogers, M.D., Lincoln, Sanford M. Rathbun, M.D., Beatrice.

Again your Diabetes Committee has participated in initiating the Diabetes Detection Drive for the year 1952-53 during National Diabetes Week, November 16-22, 1952. A large program of local publicity was undertaken through the media of newspapers, radio and television, with the invaluable assistance of the headquarters staff. The American Diabetes Association helped greatly in this effort by their nation-wide publicity program, which was also carried by newspapers, radio and television throughout Nebraska.

In general, our detection effort consisted of a free urine testing program participated in by our members, and performed for those of their patients requesting such tests, thus preserving the patient-doctor relationship principle of our association. The committee circularized the secretaries of our component medical societies, requesting their organizational cooperation in our effort, and as a result, many of these societies aided in the local stimulation through their own Diabetes Committees. A bulletin to individual members included instructions of methods to be pursued in the drive and bespoke their participation.

The Speakers Bureau again offered assistance through lectures, both on lay and professional levels. The Nebraska State Medical Journal published a Diabetes Issue for the month of November, containing four aticles and an editorial pertinent to the subject.

In addition, our committee circularized all universities and colleges throughout the state, requesting that the diabetes check be included in the physical examinations of their students. The response from these schools indicating participation was very gratifying. Gratifying, also, was the report of physicians on the number of known diabetics who took the test, indicating the awakening of these patients to the need of recurring supervision by their doctors. As of the date of this communication, the number of questionnaires returned by our members, a total of 84, is still too meager for an over-all report on the state-wide results. A second questionnaire is at present in preparation with a request for more complete information. Suffice it to say that the number of unknown diabetics discovered on the basis of the questionnaires already submitted is definitely in line with our previous efforts. On the whole, there is accumulating evidence pointing out the salutary growth of awareness of the diabetes problem prevalent in the state. We recommend the continuance of this program with further intensification of publicity on all levels.

In conclusion, the committee wishes to express its gratitude to all who aided in the furtherance of our program, with especial mention of the Speakers Bureau, the Editor of The Nebraska State Medical Journal, and the members of the headquarters staff.

Respectfully submitted,
MORRIS MARGOLIN, M.D.,
Chairman.

REPORT OF COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS

Howard B. Hunt, M.D., Chairman, Omaha; Ralph Luikart, M.D., Omaha; Frank Tanner, M.D., Lincoln; J. P. Tollman, M.D., Omaha; K. S. J. Hohlen, M.D., Lincoln.

Your committee continues to support the dual principles (1) that the in-hospital physicians must properly accept and efficiently fulfill his responsibilities to his medical colleagues, their patients and the hospital and (2) that the in-hospital physician shall be entrusted with proper authority and support by the medical staff and hospital administration. The maintenance of the office practice of radiology and pathology strengthens the position of these specialties in their contractual relations with hospitals. There is a need for more physicians in the practice of anesthesiology and physical medicine at the hospitals in our state.

There is a growing pressure from the American Hospital Association to develop financial agreements with physicians on the basis of some percentage of the net income. This sounds good in principle but in application is subject to uncontrolled abuse by hospital administrations. Inequities are being perpetrated by excessive charges levied by hospitals for such items as administration, bookkeeping, collections, depreciation of equipment, depreciation of the building, housekeeping, funds for new equipment and expansion, cost of operation of nurses training school and other items over which the radiologist has no audit or control. Such abusive packing of expenses by the hospital promotes excessive fees and leads to argument and misunderstanding between the hospital administration and in-hospital physician. A contractual arrangement based upon the percentage of the gross income or percentage of the net operating income in which actual expenses of operation are deducted is less subject to abuse and controversy and is therefore to be promoted.

The committee will support interests of the hospital physician who properly fulfills his responsibilities by the provision of efficient service adequately available to promote the best interests of the patient, the medical staff and the hospital. In case the in-hospital physician fails to properly fulfill his obligations, the committee encourages that the incumbent in-hospital physician be requested to meet directly with a subcommittee from the executive staff for rectification of this inadequacy of professional service. Recommendations for the correction of the situation should be submitted by the medical staff to the in-hospital physician directly. Any action taken by the hospital administration concerning in-hospital medical care or professional personnel should have been previously reviewed and approved by the executive committee of the medical staff.

Respectfully submitted,
HOWARD B. HUNT, M.D.,
Chairman.

REPORT OF PLANNING COMMITTEE

Floyd L. Rogers, M.D., Chairman, Lincoln; A. J. Offerman, M.D., Omaha; Morris Nielsen, M.D., Blair; Walter Benthack, M.D., Wayne; A. B. Anderson, M.D., Pawnee City.

The House of Delegates referred two matters to the Planning Committee during the 1952 session. One was in regard to the united fund for medical groups, and the other was in regard to a state committee for blood banks.

THE UNITED FUND

For a number of years members of the medical profession have been concerned about the considerable number of agencies requesting public funds in order to cary out various programs in various diseases. The number has become so great as to rouse fear that the public would be irritated by the constant requests for funds. This thinking has been very well expressed by President-Elect James F. Kelly in a resolution which he took to the House of Delegates last year and which is well worth your review.

The Planning Committee appreciated at the onset that this was a very difficult problem, but one that certainly deserves the interest and study of our association. In order to learn more about the problem, we first attempted to make a complete list of the several agencies involved. A questionnaire was sent to each of these agencies seeking information in regard to their organization, the amount of funds raised, the type of drive, and what their over-all aims and objectives were. These questionnaires were sent out early in December of 1952. A number of them have been returned, but not a sufficent number to form any opinion.

Our committee would like to report to you that this problem is being approached with a good deal of care, and we would like to emphasize that it will take a good deal of time. We feel that no plan should be made on our part relative to uniting these groups in a united fund until we are very certain of our ground. Consequently, we suggest to you that this matter be left with the Planning Committee for another year.

THE BLOOD BANK

On a national level there has been an effort to get the various states to establish blood banks in order that they may be correlated nationally. This would have great advantage in time of a national emergency. This matter has been taken up by the American Medical Association and our last information is to the effect that they are preparing and will release shortly a booklet advising state medical associations as to the formation of state medical committees on blood banks.

Our committee feels that Nebraska should cooperate wholeheartedly in this effort, but that we should not recommend the establishment of a committee until we have more information. As soon as this further information arrives, our committee will formulate general principles in regard to the establishment of such a committee and will report it to you.

Respectfully submitted,
FLOYD L. ROGERS, M.D.,
Chairman.

REPORT OF PUBLIC HEALTH COMMITTEE

Val Verges, M.D., Chairman, Norfolk; S. I. Fuenning, M.D., Lincoln; H. C. Stewart, M. D., Pawnee City.

The Public Health Committee has held meetings in July, September, and November, 1952. Our projects which are now under study are as follows:

1. Producing radio programs consisting of spot announcements which would give public health facts in regard to our state, or programs which might be of a recorded form.
2. Securing speakers on public health for county and district society meetings, with emphasis on informing our profession on state public health problems and how they can be of value to their community in education and advisory capacity.
3. The production of a film on the public health conditions of the State of Nebraska.

This last project at the present time is receiving our most attention and it is materializing. Through the efforts of Doctor Fuenning we have contacted Mr. Wendall Hoffman and Mr. Richmond Lawrence of the University of Nebraska Photography Department. Both of these men have given us much information on how this film can be produced and still be within our financial status. After a thorough discussion of the many different types of films which are already in the libraries, it was concluded that this picture would be different than any that are now available. The many characteristics of the films that are to be adopted are as follows:

1. Fourteen and one-half minutes in length.
2. A horror type; i.e., showing the most extreme cases of bad public health.
3. Opened with a statement that the film depicts actual public health problems that exist in Nebraska.
4. Based on several topics, each of which will be rapidly high-lighted.
5. Closed with the implied suggestion that some type of organization be formed to cope with these problems such as public health councils.

It is hoped to stress in this film the need of community organization in the handling of the public health problems and we are advocating that many communities adopt health councils. At the present time the organization of health councils is in the hands of the Rural Medical Service Committee, and we are wondering if this should be in the hands of our committee.

Our December meeting was postponed because of weather conditions, but at the present time Mr. Hoffman and Mr. Lawrence are preparing a treatment approach and text for consideration of the committee at our next meeting.

Respectfully submitted,
VAL C. VERGES, M.D.,
Chairman.

REPORT OF PUBLIC RELATIONS COMMITTEE

John T. McGreer, Jr., M.D., Chairman, Lincoln; H. F. Elias, M.D., Beatrice; Leroy W. Lee, M.D., Omaha; Harold N. Neu, M.D., Omaha; J. P. Gilligan, M.D., Nebraska City; D. B. Wengert, M.D., Fremont.

The work of the Public Relations Committee has continued along the lines set up by its very able former chairman, Dr. Harold S. Morgan.

Committee members and Mr. M. C. Smith attended the Public Relations Institute of the American Medical Association in Chicago during September and the Semi-Annual American Medical Association Public Relations Meeting in Denver last December. These meetings were very stimulating. It is a revelation to realize the scope of the public relations program and the expertness with which it is being conducted. Members of the Nebraska State Medical Association should be encouraged to attend some of these meetings, particularly the members of the extended public relations committee.

Your committee has devoted much time in formulating a yardstick for public measurement to determine the worth of various voluntary health and accident insurance plans through its physicians. A bulletin has been prepared entitled: "Criteria for Voluntary Health and Accident Insurance." This bulletin will permit physicians to become familiar with the facts and thus intelligently advise their patients.

To further assist the members of the profession in advising patients on voluntary health and accident insurance plans, your Public Relations Committee has expended many hours in producing a chart of the companies permitted to sell insurance in Nebraska. This chart gives a comparison of the companies gross premium incomes, gross claims paid, and a percentage of income paid out in claims for the year 1951. Explanatory notes accompany the chart. Similar charts for subsequent years will follow.

In response to complaints against physicians by health and accident insurance companies and policy holders, and with the fine cooperation of the Council on Professional Ethics, a method for investigation and handling of such complaints has been instituted.

An important phase of public relations is the welcoming of new members. Our headquarters office has prepared a brochure on the services offered by, and the activities of, the Nebraska State Medical Association which is to be distributed to new physicians beginning practice in Nebraska. The brochure will be sent to all members of the association.

While the great victory of November 4, 1952, has placed the medical profession on the offensive, it has also given the profession a great challenge which must be wholeheartedly accepted. This challenge means the continuation of a rigorous public relations program.

The chairman is acutely aware that the accomplishments of the committee are the result of the hard work and enthusiasm of its members, and Mr. M. C. Smith and his staff, and he wishes to thank them all. The continued interest and support by the membership of the association has been most gratifying.

Respectfully submitted,
JOHN T. McGREER, JR., M.D.,
Chairman.

REPORT OF RURAL MEDICAL SERVICE COMMITTEE

E. F. Leininger, M.D., Chairman, McCook; R. L. Cassel, M.D., Fairbury; Dan Nye, M.D., Kearney; E. G. Brillhart, M.D., Columbus; C. F. Ashby, M.D., Geneva; R. S. Wycoff, M.D., Lexington; R. E. Penry, M.D., Hebron.

During the year 1952, the Rural Medical Service Committee held six meetings. The highlight of this committee's activities was Senior Medical Day, which was held at the Hotel Paxton in Omaha on March 27, 1952. At this meeting the senior medical students of the Creighton University School of Medicine and the University of Nebraska College of Medicine were guests of the Nebraska State Medical Association. In the afternoon the following program was presented:

Donald Steenburg, M.D., Aurora, President, Nebraska State Medical Association, presided and gave the address of welcome.

R. L. Cassel, M.D., Fairbury—"Why I Chose a Small Town to Practice Medicine."

Fay Smith, M.D., Imperial—"The Doctor's Obligation to His Community."

Floyd L. Rogers, M.D., Lincoln—"Medical Ethics—The Doctors' Golden Rule."

Harold S. Morgan, M.D., Lincoln, President-Elect—"Functions and Relationship of County and State Medical Organizations."

Mr. Grant D. Godfrey, Beatrice, Business Manager, Beatrice Medical Group—"The Mechanics of Establishing Your Office."

Following the banquet held at 6:30 p.m., Edwin Hamilton, M.D., Kankakee, Illinois, a representative from the American Medical Association, talked on the following subject: "The American Medical Association — Your Colleague in Practicing Medicine."

Judging from the comments of Dean Harold Leuth and Dean F. G. Gillick, and the seniors of both schools, the program was well accepted. I also wish to express the sincere appreciation and thanks of our committee to these men who made such a fine program possible.

Our committee is again arranging a program for the senior medical students of both medical schools in March of 1953. It is our hope that this program will become an annual affair.

We also wish to thank the Board of Trustees who made the finances available for such a program.

In May, our committee, in cooperation with the Nebraska State Educational Association, sponsored a program at the Hotel Cornhusker. Donald A. Dukelow, M.D., Consultant in Health and Fitness, Bureau of Health Education, American Medical Association, was the principal speaker. He gave some excellent ideas on school health, a subject which has been one of the projects of this committee. Your committee is convinced that the leadership and health organization in our schools have to be provided by medical men and not by our educators. We are planning a state-wide immunization program this spring and have obtained the cooperation of the State Superintendent of Public Instruction.

The matter of health councils has been discussed by our committee the past several years. Our greatest problem has been the matter of organization. We have discussed the idea of setting them up at the state level, but we were advised that they should be started at the local level and then eventually work toward the state level. We then attempted to determine the interest of a rather prominent group of citizens in the community in such a movement. Approximately twelve letters were written to prominent citizens of McCook from the office of the Nebraska State Medical Association and we received two answers. This convinced our committee that we would have to provide our own leadership in the various communities. Therefore, I organized a local health council in McCook consisting of two local physicians besides myself, a veterinarian, a dentist, and a city sanitarian—this group to be known as the Red Willow County Health Council—and through the city manager and city council, we were appointed the advisory board to the city council in all matters pertaining to health in the city of McCook.

The city council repealed all ordinances on its books which in any way conflicted with the function of our council and then passed an ordinance making the Red Willow County Health Council as the official advisory board to the city council and city manager.

Since our council was organized, we had recommended to the city council that the sanitary landfill system of disposal be adopted and this has been set up and they are now spending about thirty thousand dollars to put it in operation.

This is only one of the many problems which we have had to deal with, some of which have not been settled. It is the intention of the health council to enlarge our membership and to extend our activities to cover the entire county in due time; however, we have kept the council small at first until it got under way. We will then be able to increase the membership as the situations warrant.

I have, and will here again, urge the other members of our committee to set up health councils in their own communities.

I would like to urge our committee to take up the subject of farm accidents as I believe this rightfully belongs to this committee. As yet we have taken no action, although it has been discussed. We should sponsor some form of farm safety program, and also some method of making farm accidents a reportable injury to the state health department.

In closing, I would like to say that the Rural Medical Service Committee was organized in January 1948 under the presidency of Dr. J. E. M. Thomson, and although our progress has been slow, I do feel that we have made definite progress.

As chairman, I wish to thank the members of my committee for their support, and I feel that I have one of the best committees in the state association.

Respectfully submitted,
E. F. LEININGER, M.D.,
Chairman.

REPORT OF TUBERCULOSIS COMMITTEE

J. Harry Murphy, M.D., Chairman, Omaha; A. W. Anderson, M.D., Lexington; Wm. Nutzman, M.D., Kearney.

This report will consist of salient plans accomplished and proposed.

In the year 1952 a speaker on chest diseases, including tuberculosis, was included in the group recruited by the Speakers Bureau of the association. This was accomplished through the efforts of this committee and by money ($1,000.00) obtained from the Nebraska Tuberculosis Association. This was a valuable educational feature.

The Trudeau Society membership which was urged by the committee has increased satisfactorily and two meetings have been held with outstanding scientific programs.

In 1952 there were no postgraduate training periods in tuberculosis through the assistance of the Nebraska Tuberculosis Association because there were only limited classes available this year. This opportunity is still available to members of the medical society. It is urged that interested physicians apply.

In the discussions of the committee stress is urged in the Education Campaign and case finding programs in tuberculosis. It is recommended that physicians making pre-school and school examinations routinely use the tuberculin test and x-ray of positive reactors.

Physicians are urged to aid in the rehabilitation of convalescent patients. They are reminded that Nebraska Tuberculosis Association seal sale fund may be used to the extent of five per cent of a county's funds to meet this expense through the state tuberculosis hospital at Kearney.

Increased facilities for teaching medical students and nursing personnel in the diagnosis and care of tuberculosis are urgently needed.

More detailed report of the committee's discussion has been submitted to the association.

The mortality rate of tuberculosis has declined in the state, but our findings point to the fact that there is a high rate of morbidity and that the problem of control of tuberculosis is not finished.

Respectfully submitted,
J. HARRY MURPHY, M.D.,
Chairman.

REPORT OF COMMITTEE ON UNIFORM FEE SCHEDULE AND ADVISORY TO GOVERNMENTAL AGENCIES

R. E. Garlinghouse, M.D., Chairman, Lincoln; W. W. Waddell, M.D., Beatrice; A. J. Schwedhelm, M.D., Norfolk.

This committee has held one meeting, August 27, 1952. The meeting was held in conjunction with the Board of Control, State Capitol, and representatives of the Department of Assistance and Child Welfare. In addition, Dr. Harold S. Morgan, President of the Nebraska State Medical Asociation, Dr. R. B. Adams, Secretary-Treasurer of the Nebraska State Medical Association, and Mr. Merrill Smith, Executive Secretary of the Nebraska State Medical Association, were present.

The main topic of the meeting was the Formulary which was adopted in its incompleted form by the House of Delegates of the Nebraska State Medical Association at the 1952 annual meeting. It was explained that the Formulary was not yet completed, but that it is being completed as rapidly as possible. The many facets of the Formulary were discussed.

Following this meeting a letter, dated October 28, 1952, was received from Mr. Neil Vandemoer, Director of Assistance, which is quoted in part:

> "I wish to advise that the Board of Control has adopted the use of the Formulary which was recommended to them by your committee on the following basis: 'That the proposed formulary is acceptable in principle, used as a guide, provided that its adoption will not require auditing of prescription accounts to a degree which would result in disproportionately increased costs, and provided further that its adoption shall not interfere with the functioning of any county's plan which achieves substantially the same results as those achieved by aid formulary'."

It has been previously explained to the Board of Councilors and the House of Delegates that the Formulary is the result of the combined efforts of the Committee on Uniform Fee Schedule and Advisory to Governmental Agencies and the Joint Committee on Pharmacy and Therapeutics of the Lincoln Hospitals (Lincoln General, Bryan Memorial and St. Elizabeth). Immediately after a meeting of this latter committee, Dr. Floyd Rogers, Chairman, sent the following letter to Dr. Harold S. Morgan, President of the Nebraska State Medical Association:

> "January 16, 1953
>
> "Harold S. Morgan, M.D., President
> Nebraska State Medical Association
> 1315 Sharp Building
> Lincoln 8, Nebraska
>
> "Dear Doctor Morgan:
>
> "I am writing you as Chairman of the Joint Committee on Pharmacy and Therapeutics of the Lincoln Hospitals (Bryan Memorial, Lincoln General, Saint Elizabeth). Our committee has completed the preparation of a formulary. At the time of our last meeting, January 13, 1953, the committee unanimously voted to have this formulary become a state medical association activity. This action will imply that our Joint Committee on Pharmacy and Therapeutics will cease control of the formulary. It should promptly be referred to the proper state association committee in order that no effort will be lost.
>
> "Further, we would recommend that you establish immediately a committee empowered to keep this formulary revised. Our experience leads us to suggest the personnel of this committee, at least for the first year or two. We would suggest:
>
> Joseph B. Burt, Ph.D., Chairman
> Daniel F. Moravec, M.Sc., Secretary
> F. H. Hathaway, M.D.
> P. J. Maxwell, M.D.
> F. L. Rogers, M.D.
> G. R. Underwood, M.D.
> Patrick J. Conner, Ph.G.
>
> Sincerely yours,
> FLOYD L. ROGERS, M.D.,
> Chairman, Joint Committee on Pharmacy and Therapeutics."

Following receipt of this letter, the Committee on Uniform Fee Schedule and Advisory to Governmental Agencies assumed the full responsibility of the Formulary. Dr. Harold S. Morgan, President, appointed the following sub-committee:

Joseph B. Burt, Ph.D., Chairman
Daniel F. Moravec, M.Sc., Secretary
F. H. Hathaway, M.D.
P. J. Maxwell, M.D.
F. L. Rogers, M.D.
G. R. Underwood, M.D.
Patrick J. Conner, Ph.G.

It will be the responsibility of this sub-committee to make adequate revisions in the Formulary.

At the moment of this report, the Formulary is almost complete and ready to go to press. It is hoped that at the meeting of the Board of Councilors in February a complete copy may be presented to the Councilors.

A copy will be sent to each member of the Nebraska State Medical Association. The Department of Assistance, State Capitol, will purchase enough copies for their use. The Nebraska Pharmaceutical Association has expressed their desire to purchase enough copies to send one to each member of their association.

This committee has not considered a revision of the Fee Schedule as this was accomplished last year. There have been on requests for consideration of changes of any fees during the year.

Respectfully submitted,

R. E. GARLINGHOUSE, M.D.,
Chairman.

REPORT OF MENTAL HYGIENE COMMITTEE

Robert S. Wigton, M.D., Chairman, Omaha; G. L. Sandritter, M.G., Ingleside; Robert Stein, M.D., Lincoln.

The chief elements of our report at this time are suggestions and proposed topics of papers, which might constitute a Mental Health Issue of The Nebraska State Medical Journal, and which, according to Doctor Stein, the prior chairman, have been a consideration last year.

We have suggested a series of titles pertaining to basic information about mental health in the state, such as: "A Summary of Facilities Available;" some comments of "Medical School Training Program;" "The New Psychiatric Institute;" a paper by Doctor Gysin on "Activities of the Veteran's Hospital;" one or two clinical papers that would be of general interest, stemming from our own meeting and previously unpublished.

Since we have previously taken this up at a meeting of our Nebraska Society of Neurology and Psychiatry, we felt that we might bring before this group a suggested series of titles for modification or addition by the psychiatric group, and will arrange with the possible authors to compose such papers before submitting the final list to you. Our next meeting will be held early in March, and we should be able to submit a list of titles at that time and have the authors prepare them for publication at such time as it might be convenient to the Editors of the association journal, if the Nebraska State Medical Association and the Editors still thought that this would be a desirable move.

We are pleased to have this opportunity to present various state mental health problems, and I think it is a good stimulus to our psychiatric group, as well as a good thing to submit some of this material in a coordinated type of fashion.

We have some apologies to make for being rather slow on the up-take in getting this type of program ready, but I hope that we will be able to make it a coordinated and useful contribution.

Respectfully submitted,

ROBERT S. WIGTON, M.D.

Woman's Auxiliary

Mrs. G. Kenneth Muehlig was hostess to the Omaha-Douglas County Medical Auxiliary on March 10th for a dessert luncheon at her home.

Miss Grace Koons, Obstetrical Supervisor of the University of Nebraska Hospital, spoke on "Disaster Born Babies" with a demonstration of emergency delivery and care. Her subject was part of a nursing course given to nurses and auxiliary workers in cooperation with the Civilian Defense in its atomic warfare program.

A Nurses' Scholarship or Loan Fund Committee was appointed by Mrs. James J. O'Neil, president of the Omaha-Douglas County Medical Auxiliary, to make suggestions for the disposition of the Nurses' Scholarship or Loan Fund. The committee, under the chairmanship of Mrs. George Alliband, made the following recommendations:

1. That the money be used as a loan fund.
2. That the student councilor of the Nebraska Nurses' Association recommend applicants — the final selection to be left to the discretion of the committee.
3. That the loan fund, which is to be deposited with the Nebraska Medical Foundation, Inc., be dispensed according to the auxiliary's discretion.

Since the passing of the recommendations by the Executive Board, one applicant has already availed herself of a loan to further her nursing education.

Mrs. Alice Lukens, president of Tri-County No. 2 has informed us that eighty members of the Y-Teens in the Tekamah high school heard a wonderful Nurse Recruitement program brought to them by Miss Irma Kyle, Director of the University of Nebraska School of Nursing, Miss Zelda Nelson, Counselor for the Nebraska State Nurses' Association, a second year student of the Nebraska School of Nursing and a student practical nurse from the Omaha Public School of Vocational Nursing.

A film, "For You to Decide" was shown.

Ten personal interviews were held before the meeting.

As a result of this fine program four girls have definitely decided to pursue nursing as a career and one or two girls have decided to take the training for a practical nurse.

The Buffalo County Medical Auxiliary held its February meeting at the Fort Kearney Hotel in Kearney on February 25th. Dinner was served to seventeen members.

Mrs. Dan Nye introduced Ralph Lancaster, Kearney's water commissioner, who spoke on "Water Fluoridation."

It was announced that Mrs. Stella Christie, Red Cross executive secretary is to be the speaker at the March meeting.

Newly-elected president of the Auxiliary to the Adams County Medical Society is Mrs. O. A. Kostal. She will succeed Mrs. Herbert Anderson.

She and other officers, Mrs. H. J. O'Donnel, vice president, and Mrs. C. L. Kleager, secretary-treasurer, were named Tuesday, March 3rd at the auxiliary's dinner meeting at the Hastings State Hospital.

Following the business meeting, auxiliary members joined their husbands to view Dr. E. C. Foote's movies on Africa.

Dr. and Mrs. C. J. Miller were hosts on Thursday, March 5th to the members of the Four-County Medical association with twelve doctors and their wives present.

Dinner was served at Harmony House in Ord after which all went to the home of Dr. and Mrs. Miller.

Dr. Henry Kammandel, a member of the faculty of the Nebraska College of Medicine spoke to the group.

Members of the Tri-County Medical Association and the auxiliary met for dinner and a meeting on February 27th in Sidney

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The Lancaster County Medical Auxiliary met for luncheon at the University Club on Monday, March 2nd.

Annual committee reports were given and newly elected officers were announred as follows: Mrs. John T. McGreer, Jr., President; Mrs. George Covey, Vice President, and Mrs. Allan Campbell, Treasurer.

Members of the Dawson County Medical Auxiliary met on February 14th in the Tassel Room of the Cornland Hotel in Lexington.

The group enjoyed a one o'clock luncheon and listened to an address given by Dr. Cecil L. Wittson of Omaha, head of the Neuropsychiatric unit of the University of Nebraska College of Medicine. Dr. Wittson spoke on "Mental Health in Nebraska."

Mrs. Walter Benthack was honored as Wayne, Nebraska's "First Lady of 1953" when Alpha Psi chapter of Beta Sigma Phi entertained approximately fifty in the Woman's Clubroom.

Mrs. Benthack's help to her physician husband in his practice at Pierce and Wayne in the past thirty years and her efficiency in helping manage the Benthack hospital in recent years were stressed.

Dr. and Mrs. Benthack are parents of six children, two of them doctors and one a medical technician.

MINUTES OF THE TWENTY-SEVENTH ANNUAL MEETING

May 13, 1952

The 27th Annual Meeting of the Women's Auxiliary, Nebraska State Medical Association, met at the Cornhusker Hotel, Lincoln, Nebraska, and convened at 9:55 a.m.

The meeting was opened by Mrs. B. R. Bancroft, president, and the invocation offered by Mrs. P. O. Marvel. A most cordial welcome was given by Mrs. Bancroft to all attending the convention. The following past State Presidents were presented:

Mrs. Morris Nielsen	1931-32
Mrs. J. M. Woodward	1936-37
Mrs. W. W. Carveth	1941-43
Mrs. P. O. Marvel	1948-49
Mrs. C. F. Ferciot	1949-50
Mrs. Glenn Whitcomb	1950-51

Mrs. Bancroft announced that there are now 21 members-at-large, and introduced two who were present.

The order of business was announced, and a motion was made to accept it as given. The motion was seconded and carried.

Mrs. Covey made a motion to accept the general convention program as read. It was seconded and carried.

Mrs. Bell gave the Treasurer's Report, a copy of which is on file.

There was no correspondence.

Mrs. Donelan took the chair while Mrs. Bancroft read the President's Report. This was a very inspiring message and reflected the enthusiastic spirit with which Mrs. Bancroft sparked her many accomplishments of the year. A copy of this report was placed on file.

COUNTY REPORTS

Adams—Mrs. Carl Gouldman.

Buffalo—Mrs. Dean Lane.

Dawson—Mrs. Pile, by Mrs. Ray S. Wycoff.

Douglas—Mrs. Staubitz.

Fillmore-Saline—Mrs. Homan, by Mrs. L. W. Forney.

Holt-Northwest—Mrs. R. R. Brady.

Lancaster—Mrs. L. E. Sharrar.

Madison-Six—Mrs. Kohtz, Vice President, who also paid tribute to Mrs. Salter.

Lincoln—Mrs. Shaughnassy.

Nemaha-Otoe—Mrs. Fenstermacher, by Mrs. F. H. Tushla, given by Mrs. Stonecypher.

6th County District—Mrs. H. O. Bell.

Tri-County No. 2—Mrs. Robert Reeder, by Mrs. Lukens.

Scottsbluff—Mrs. Heincke, by Mrs. Riddell.

Tri-County No. 3—Mrs. George DeMay.

Convention Chairman, Mrs. L. E. Sharrar, announced that there were 40 registrations.

Mrs. W. Howard Morrison, Finance Chairman, gave her report, a copy of which is on file.

A discussion followed concerning an added allotment to cover the State Convention expenses, to relieve the added expense that is carried by the hostess Auxiliary. A motion was made by Mrs. Brady that the proposed budget for 1952-53 be adopted, with convention expense allotment to be $200.00. The motion was seconded and carried.

It was moved by Mrs. Howard Morrison that all officers be asked to send all expenses in before the convention in order to facilitate the planning of the budget. This motion was seconded and carried.

Mrs. Bancroft asked for a discussion on the point of a raise in dues.

Mrs. Kohtz moved we accept the recommendation of the executive board that state dues be raised to

$2.00 and national dues remain the same. The motion was seconded. The resulting vote was as follows: 30 affirmative, 2 negative. Motion carried.

It was moved by Mrs. Muehlig that the reports of chairmen and county presidents be approved and accepted. Motion seconded and carried.

Mrs. Bancroft explained a map of the state showing the organized auxiliaries by counties. She asked that all home addresses of doctors' wives please be sent in to the secretary, and also that the county chairmen's reports be given the secretary to be placed on file.

Mrs. Garlinghouse, President-elect, announced that the post-convention meeting would be a 9:30 breakfast, and gave a resume of the program planned for Wednesday, May 14.

Meeting adjourned.

Respectfully submitted,
MRS. JOHN S. ANDERSON,
Secretary.

May 14, 1952

The meeting was called to order by Mrs. Bancroft.

Memorials were given for three former Auxiliary members. Mrs. Arthur Offerman presented that of Mrs. J. D. McCarthy, Mrs. R. H. Kohtz that of Mrs. George Salter, and Mrs. H. J. Lehnhoff that of Mrs. D. C. Hilton.

Mrs. Ruth Murphy was made an honorary member of the Auxiliary in appreciation of her long and devoted service to the organization. Mrs. Bancroft presented her with a pin and corsage.

Mrs. P. O. Marvel conducted the installation of officers: Mrs. Richard E. Garlinghouse, President; Mrs. James Donelan, President-Elect; Mrs. George Covey, Treasurer; Mrs. Arthur Smith, Corresponding Secretary, and Mrs. Hiram Hilton, Recording Secretary.

The meeting was then turned over to the new President, Mrs. Garlinghouse, who welcomed those at the meeting. She pointed out that during the past two years, the Auxiliary had aided materially in the fight against socialized medicine. In this fight, we have made many friends among allied professional groups, who realize that the Doctors have been the bulwark against a totalitarian way of life. We also have made enemies. As doctors' wives, we must regain the confidence of members of the community. We must do twice as much in community affairs as citizens and restore the idealism with which the profession has always been regarded. She closed with the slogan—"BE an auxiliary member, GET an auxiliary member."

Mrs. Woodward moved and Mrs. Rowe seconded a motion asking that copies of the memorials given for Mrs. Salter, Mrs. McCarthy, and Mrs. Hilton be sent to their respective families.

There was a panel discussion on Nurse Recruitment. Participants were Mrs. Fred Ferciot, chairman of Nurse Recruitment for the state, Mrs. Luther Gibson, chairman in Lincoln, and Mrs. George DeMay, who has organized the group in Grand Island. The importance of a closer relationship between the Nurses Association and Medical Association was stressed, as well as the importance of doctors' wives who have been nurses joining the Nurses Association. The state program for recruitment includes teas and meetings for high school students interested in nursing, the sending of speakers to rural schools, the dissemination of information about scholarships. It was suggested that parents be informed about the improvements in the nursing profession. Mrs. Ferciot asked that the profession not be glamorized, but dignified—that the importance of bedside care by nurses be underlined, and that the fun involved in being a nurse be told prospective students.

Mrs. R. R. Brady, of Ainsworth, former chairman of Today's Health, urged everyone to become familiar with the magazine, and introduced Mrs. Paul Marx, this year's chairman.

Dr. Harold E. Morgan, in his capacity as President of the Nebraska Medical Foundation, Inc., told what we, as auxiliary members, could do to help this organization. The cornerstone of the Foundation is:

1. Medical school scholarships.
2. Financing of research.
3. Supporting of post-graduate medical education.
4. Investigations in the domain of Public Health.

We can help by:

1. Dissemination information about memorial giving.
2. Raising money in auxiliaries for the foundation.
3. Spreading information about estate giving and wills.
4. Promoting rummage sales and bazaars, which are good advertising as well as being profitable.

Dr. John Thomas of Omaha spoke on the Cerebral Palsy Unit—a training and rehabilitation school for the cerebral-palsied children of Nebraska, which is housed in the Orthopedic Hospital in Lincoln. Nebraska is the only state in the United States which has a Cerebral Palsy Committee in the State Medical Society. Drs. Campbell, Wolters, Ferciot, and Gogela comprise the committee, and Dr. Howard Mitchell of Lincoln and Dr. John Thomas of Omaha supervise the work at the hospital. The legislature has appropriated $50,000 to operate the center for two years. Dr. Thomas suggested that:

1. We tell everyone about the unit.
2. We make a gift of some piece of special equipment. Suggested were:

a. A tape recorder—best make can be obtained at institutional rates for $130.00. Tapes are $20.00.

b. An audiometer—for testing hearing, auditory stimulation, teaching speech—price $525.00.

c. Record player for entertainment and rhythm work.

d. Contributions of $25, $50, or $100 for certain books in the reading program.

e. Contributions to record fund.

f. Contributions to toy fund.

g. A television set.

Miss Smrha spoke about the Springdale Camp for Diabetic Children and showed pictures of the camp. She stated that it costs $60.00 to send one child to camp. Gifts of any size are welcome. Parents pay what they can — the rest comes from contributions.

The meeting was adjourned.

Respectfully submitted,
MRS. HIRAM HILTON,
Recording Secretary.

POST-CONVENTION BOARD MEETING

May 15, 1952

The post-convention board meeting of the Nebraska State Medical Auxiliary was held on Thursday, May 15, 1952 in the State Room of the Cornhusker Hotel. It was a breakfast meeting at which twenty-nine members were present.

Mrs. Garlinghouse welcomed the new board. The roll was called and officers of the group were introduced. Mrs. Woodward urged that everyone read the constitution of the Auxiliary, and Mrs. Pfeiffer asked that all bulletin items be submitted by the first of the month.

Mrs. Bancroft announced that she had sent out letters to all doctors' wives in the state who were not organized. She obtained responses from thirty members at large. It was agreed that Mrs. Bancroft should get credit for these new members and should write, letting them choose whether to consider their dues paid for last year or to add $1.25 and have them paid for the year 1952-53. The problem arose due to the increase in 1952-53 dues of $1.25.

Mrs. Staubitz made and Mrs. Bancroft seconded the following motion:

> "I move the Secretary write the President of the State Medical Society requesting that the State Medical Journal be sent to the homes of said members."

The motion was carried.

Mrs. Garlinghouse asked that the Board get opinions from all over on the state meeting, dealing with improvements in information provided, entertainment, and procedure.

Mrs. Wood suggested that each auxiliary have an official delegate, responsible to appear and make a report to her group. It was also suggested that there be a Greeters or Hospitality Committee for the benefit of those from out of town. It was proposed that delegates be appointed whose husbands are delegates or councilors and that a program be sent out ahead of time.

Announcement was made that Grand Island would henceforth be known as Tri-County No. 1 instead of Tri-County No. III.

The following were announced to be delegates to the A.M.A. convention in Chicago; Mesdames Bancroft, Offerman, Covey, O'Neill, Nutzman, and Elliot. Mrs. Whitcomb and Mrs. Staubitz were designated alternates.

Since the mailing list is being revised, it was asked that an up-to-date list of the names of doctors' wives be sent in. These names may be obtained from the Councilor for your area.

Mrs. Garlinghouse requested that all county presidents send her a list of the officers and committee chairmen of their Auxiliaries.

Mrs. Mason Lawson advised that we not force a detailed program down the throats of new auxiliaries. She suggested that they be interested in one thing. She also thanked the group for the courtesies shown her while she was in Lincoln.

Mrs. Kohtz suggested that the councilors comprise the Hospitality Committee and that they endeavor to see that members in their counties get to the meetings.

It was announced that Mrs. James O'Neill would be chairman of the 1953 convention in Omaha.

The meeting was adjourned.

Respectfully submitted,
MRS. HIRAM HILTON,
Recording Secretary.

FALL BOARD MEETING OF THE NEBRASKA STATE MEDICAL AUXILIARY

September 26, 1952

The Fall Board meeting of the Women's Auxiliary of the Nebraska State Medical Association convened at 10:30 a.m. at the Cornhusker Hotel, Lincoln, Nebraska. Mrs. R. E. Garlinghouse, President, presided and opened the meeting with an invocation.

Roll call was taken and 19 members responded. Minutes of the 27th annual meeting were read and approved as corrected. The minutes of the post-convention board meeting were also read and approved.

Mrs. Covey gave the treasurer's report. The following bills from the preceding fiscal year, 1951-52, were presented:

Mrs. L. E. Sharrar, convention tea expenses	$ 50.00
Mrs. J. S. Anderson, expenses of secretary	5.00
Mrs. B. R. Bancroft (year book expenses, $162.00; telephone, postage, and mimeographing, $127.29)	289.29
Brown Printing Co., convention programs	88.50
Mrs. Isaiah Lukens, typing, phone, postage	10.34
Mrs. Glenn Whitcomb, telephone (nominating committee)	5.25
Mrs. James Donelan, expenses, chairman at large	4.00
Brown Printing Co., balance on programs	10.00
	$462.38
Balance in bank	$ 85.64

Mrs. Garlinghouse asked Mrs. Lukens to take the chair so that she might speak as a member of the group. She reminded the Board of her previous aims and goals and of her particular desire to aid some worthy project. But due to the fact that the treasury does not permit taking any such step, she now has but one goal — to leave the auxiliary in a sound financial condition. She recommends that this Board avoid all expenses possible so that the future Board will be able to operate with a clear and complete budget.

The following bills were presented:

State Printing Co., year books	$35.50
Addressograph-Multigraph Corporation	2.04
Brown Printing Service, stationery	17.50

Mrs. Muehlig made and Mrs. Sharrar seconded the following motion:

> "I move that the treasurer's report be accepted as read and placed on file."

Motion was carried.

Mrs. Offerman presented a revised budget for consideration. Mrs. Garlinghouse explained the dilemma caused by the three organizations—City, State and National Auxiliaries—each receiving a part of the dues paid by the individual auxiliary members, and each with a different fiscal year date.

A few of the basic rules on procedure were explained by Mrs. Woodward, Parliamentarian.

Mrs. Ferciot made the following motion:

> "I move that the president appoint an auditing committee to audit the books at the end of the annual meeting in May."

The motion was seconded by Mrs. Lukens. It was carried.

Mrs. Woodward recommended that all important motions be made in writing and presented to the secretary.

The "Members at Large" campaign became an important problem due to the increase in dues. To those who responded, it was necessary to write and explain about this increase and allow each one to choose whether to consider their dues paid for last year or to add $1.25 and consider them paid for the year 1952-53. It was also discovered that some of these were from a county where there is an active auxiliary, which is unconstitutional. Such checks will have to be returned.

Mrs. Sharrar made the following motion:

> "I move that the secretary be instructed to write a letter of apology to ladies who should not have been solicited as members-at-large and that their checks should be returned."

Motion was seconded by Mrs. Ferciot and carried.

Mrs. Offerman presented an excellent report on the national convention held in Chicago in June.

The Board elected the following committee to nominate officers for the coming year:

Mrs. Morris Greer, Omaha
Mrs. R. H. Kohtz, Bloomfield
Mrs. M. A. Wood, Lincoln
Mrs. B. R. Bancroft, Kearney
Mrs. Arnold McDermott, Omaha
Alternates: Mrs. Lynn Sharrar, Lincoln, and Mrs. Harry Jakeman, Fremont

The slate was accepted.

The following were appointed as members of the convention committee:

Mrs. J. J. O'Neill, General Chairman
Mrs. R. E. Garlinghouse, President
Mrs. Hiram Hilton, Secretary
Mrs. T. T. Smith
Mrs. G. K. Muehlig
Mrs. Henry Kammendal

Mrs. Donelan and Mrs. Lukens will be invited to attend all planning meetings.

Mrs. Pyle moved the acceptance of this committee. Mrs. Lukens seconded the motion, and it was carried.

These standing committee chairmen presented reports:

Program—Mrs. R. R. Brady
Legislative—Mrs. Hancock
Nurse Recruitment—Mrs. Ferciot
Today's Health—Mrs. Marx
Public Relations—Mrs. Muehlig, Mrs. Lukens, Mrs. Sharrar

Respectfully submitted,
ELIZABETH SMITH,
(For Mrs. Hilton)

Sugar production the world over is potentially much greater than human consumption at present levels of population that scientists are constantly seeking non-food outlets for it.

Nebraska State Department of Health

ORGANIC RODENTICIDES

The most widely used rodenticide at the present time is warfarin, chemically known as 3-(alpha-phenyl-beta-acetylethyl)-4-hydroxycoumarin. It is available either as a concentrate, containing 0.5 per cent of the active ingredient, or as a finished bait having 0.025 per cent of the substance. The concentrate is meant to be diluted with bait, such as corn meal, corn oil, or peanuts, so that the finished product contains approximately 0.025 per cent warfarin. These baits are very effective in controlling all species of rats and mice.

There are very marked differences among animals in susceptibility to warfarin. For the majority of higher animals it has little toxicity. For instance, chickens have been raised to maturity with a feed containing the substance. Dogs do not seem to be susceptible to it. Warfarin poisoning in man is a rare possibility, except that poisoning with a suicidal intent is possible. On the other hand, rats and mice are specifically susceptible to warfarin. In spite of this, a single low dose is seldom fatal to them. Workers at the Wisconsin Alumni Research Foundation have shown, however, that the effective toxicity of the compound is greatly increased with repeated doses. Hence, the material is put in baits so that the rodents are attracted to it several times over; while there is relatively no danger to other animals.

Warfarin is readily absorbed through the mucosa of the intestine. There is little or no danger of absorption through the skin or through inhalation. Evidently each end of the molecule has a specific physiological action. It is thought 4-hydroxycoumarin, by inhibiting the formation of prothrombin, reduces the clotting power of the blood, while the rest of the molecule produces capillary damage leading to hemorrhage upon the very slightest trauma.

Animals intoxicated with warfarin exhibit increasing pallor and weakness reflecting blood loss. Experimental evidence indicates that hematoma formation is more common than free hemorrhage. There appears to be no typical location for hematoma formation, the location being a matter of chance. Many times the bleeding is associated with the central nervous system and paralysis may occur several days before death.

(Continued on page 162)

Know Your Blue Shield Plan

DOCTORS MUST CONTINUE TO "SELL" BLUE CROSS - BLUE SHIELD

Not too long ago we were asked when the doctors were going back to the practice of medicine and quit the insurance business. The reply to such a question is obvious and needs no detailing here; however, the latter part of the question is challenging.

Prior to the advent of the Blue Cross-Blue Shield Plans, the average doctor knew little about prepaid medical care programs. Commercial carriers had shied away from this type of insurance because of a lack of actuarial experience. Today, in the face of the tremendous growth of Blue Cross-Blue Shield Plans throughout the nation, plans which were originated, sponsored and nurtured by doctors, commercial companies have entered the field of prepaid medical care insurance in a vigorous competitive fashion. THIS IS GOOD!

The phenomenal growth of prepaid insurance programs has, however, added another facet to the doctors' professional responsibilities. Whether the medical profession likes it or not, we are in the middle of the voluntary health insurance picture. Our patients often look to us for guidance in choosing this type of insurance carrier; hence, we must know a great deal about the type of protection that is being offered our patients and we must be able to advise these patients as to what type of policy best suits their needs. In cases of dispute between insurance carriers and patients, we again find ourselves in the middle of an argument that potentially can, and often does, interfere with good public relations.

The essential requirements of a good prepaid medical care policy have been formulated by the Public Relations Committee of the Nebraska State Medical Association. These have been distributed as confidential information to the members of the association and should prove a reliable guide to the doctor in formulating health insurance advice to his patients.

Today, more than ever before, the doctors of the state and nation are engaged in a selling job — in selling an idea, not a commodity — selling Mr. and Mrs. Average American the idea that voluntary prepaid sickness and hospital insurance is medicine's answer to the financial problems incurred when sickness strikes.

HAROLD S. MORGAN, M.D.,
President, Nebr. State Med. Assn.

The charts shown on the opposite page give a graphic presentation of the growth and progress made by the Blue Shield Plan during the last eight years. If Nebraska Medical Service is to "do the job," and the record afirms that it can, it must have the continued active cooperation of the medical profession. Now, accelerated enrollment and retention of present members are major objectives, and it is essential that all doctors redouble their efforts to encourage their patients to enroll and to retain their membership.

The special Individual Enrollment campaign during the month of April offers an excellent opportunity for doctors to promote enrollment in Blue Cross-Blue Shield. Will you, this month, display the campaign poster in your reception room, and make the promotional literature available to all who come to your office?

ARTHUR J. OFFERMAN, M.D.,
President, The Blue Shield Plan.

HEALTH NEEDS OF TODAY REQUIRE NEW METHODS OF MEDICAL EDUCATION

Medical educators must restructure the entire medical curriculum to meet the changing health needs of today, according to Dr. George Packer Berry, dean of Harvard Medical School and a member of the Board of Directors of the Commonwealth Fund, writing in the March issue The Journal of Medical Education.

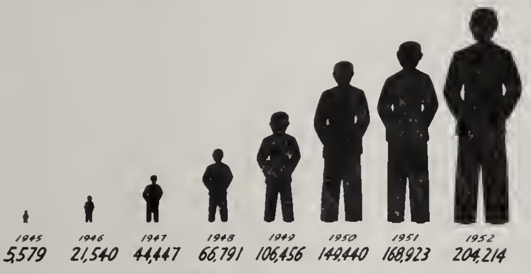
Dr. Berry names freedom of opportunity for good health as a basic human right and declares "that this opportunity for good health should be provided for all is an insistent and growing demand."

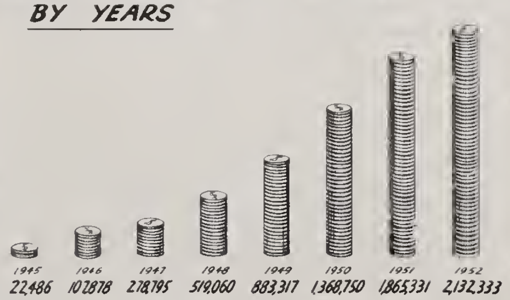
This movement must come from the medical profession itself and properly starts with the education of future doctors. Dr. Berry goes on to say, "Let us not forget that if we do not do some very hard thinking and acting right now, some one whom we believe to be less competent than we will do the acting for us without thinking. If we believe that we are the best architects, it is up to us to produce the plans."

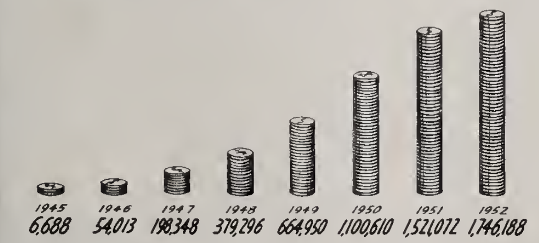
Advances in medicine have increased life expectancy by a third since 1900, says Dr. Berry, and in so doing have contributed to the creation of new and difficult problems which medicine must help to solve. Medicine must train men to serve the whole patient rather than merely to cure disease or aid disabilities. This calls for extensive revision of the medical curriculum.

THE BLUE SHIELD PLAN

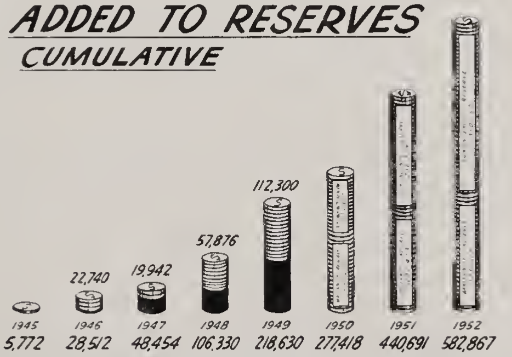
NEBRASKA MEDICAL SERVICE

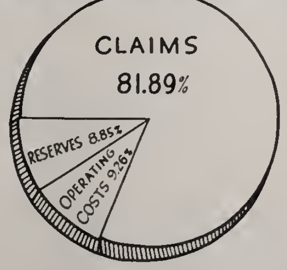

GROWTH IN ENROLLMENT
CUMULATIVE

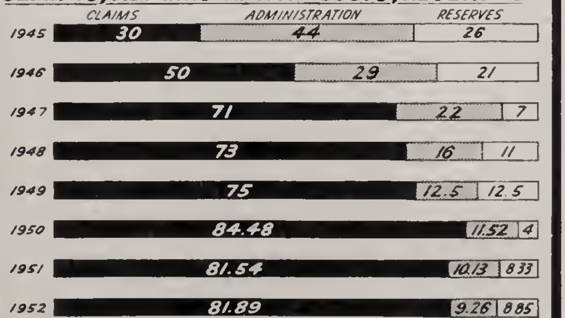

EARNED INCOME FOR THE PAST EIGHT YEARS
BY YEARS


AMOUNTS PAID FOR MEMBERS CLAIMS
BY YEARS

TOTAL AMOUNT PAID FOR CLAIMS, EIGHT YEARS $5,671,165


ADDED TO RESERVES
CUMULATIVE


HOW THE INCOME DOLLAR WAS SPENT in 1952


CLAIMS, ADMINISTRATION COSTS, RESERVES

STATE DEPARTMENT OF HEALTH

(Continued from page 159)

Warfarin poisoning in man is a rare possibility because of the fact that a single dose does not produce any symptoms. However, poisoning with suicidal intent is possible. In man the initial symptoms of warfarin poisoning are back pain and abdominal pain. These symptoms do not occur until a sufficient amount has been injested, usually several daily doses. After onset of the above symptoms vomiting and nose bleeding usually occur as well as a general petechial rash. The prothrombin time is greatly prolonged.

The toxicity of warfarin to man is available from a case of attempted suicide. Serious illness was induced by ingesting 1.7 milligrams per kilogram of body weight per day for six days. All signs and symptoms were caused by internal hemorrhage. In this case recovery was complete after massive doses of vitamin K and multiple small transfusions.

The most successful treatment of warfarin poisoning has been with vitamin K therapy. The recommended dosage is 65 milligrams repeated three times on the first day of treatment. Smaller doses should be continued until the prothrombin time has reached normal. In addition, a blood transfusion should be given.

Sodium fluoroacetate, commonly called 1080, is another organic rodenticide enjoying popularity at the present time. Many toxicologists consider sodium fluoroacetate to be the most deadly poison known to man. The statement has been made that enough 1080 can be placed on the head of a pin to kill a man. Fortunately, this compound is not available to the general public, but only to pest control operators who must post an insurance policy of a specific sum. However, the danger lies in the fact that many pest control operators are careless in placing their 1080 bait containers so that the general public can come in contact with them. It has been strongly recommended that 1080 solutions be colored with a black dye, and then placed in baby chick waterers which in turn are placed in locked bait boxes which are fastened to the floor.

If taken internally 1080 is rapidly absorbed from the gastro-intestinal tract. It is not readily absorbed through the skin, but dusts of the poison are absorbed in the pulmonary system.

Physiologically, 1080 acts through a direct interference with the ketone bodies by an ill-defined mechanism. In addition, it has an effect on either or both the cardiovascular and nervous systems in all species and in certain species on the skeletal muscles. Man gives a mixed type of response with the cardiac features predominating. Action on the central nervous system of man produces convulsive seizures, epileptiform in character followed by severe depression.

Experimental evidence has shown that primates and birds are the most resistant and carnivora and rodents are the most susceptible. In man the dangerous dose is 0.5 to 2 milligrams per kilogram of body weight.

Very little is known about the signs and symptoms of poisoning in man. In a few proven cases, the first symptoms appeared over a valuable latent period of 30 minutes to 2 hours. These are nausea and mental apprehension, followed by epileptiform convulsions, pulsus alternans, ventricular fibrillation and then death. Unless an autopsy is performed within a few hours after death no trace of 1080 can be found in the body. Histopathologic changes in poisoning by 1080 contribute little to illustrate the mode of action.

In most cases death has been so rapid that little or no treatment has been possible. In the case of animals compounds supplying acetate ions have shown antidotal effects. A single large dose of magnesium sulfate (800 mg/kg.) given intramuscularly has saved the life of rats dosed with a lethal amount of 1080.

SUMMARY

The two most popular organic rodenticides used at the present time are warfarin and 1080. The first, warfarin, is highly specific to rats and mice and the possibility of human poisoning is slight. On the other hand, 1080 is an extremely toxic non-specific poison, killing rats, mice, and humans in a very short period of time.

ACKNOWLEGEMENTS

Much of the information used in the preparation of this article was gained from publications of the U.S.P.H.S.

WILLIAM F. RAPP, JR.,
Division of Sanitation,
State Department of Health,
Lincoln, Nebraska.

DOCTOR . . . Please take each copy of your Journal home. The wives complain that they never get to read the Auxiliary column.

MINUTES OF MEETING OF BOARD OF COUNCILORS

February 22, 1953

The Annual Mid-Winter Meeting of the Board of Councilors was held at the Hotel Cornhusker, February 22, 1953, and was called to order at ten o'clock by Dr. Earl Leininger, Chairman of the Council.

Present were Drs. Paul Reed, W. C. Kenner, J. C. Waddell, W. E. Wright, R. T. Van Metre, R. E. Harry, F. A. Mountford, Wm. M. McGrath, E. F. Leininger, Harold S. Morgan, President; James F. Kelly, President-Elect; D. B. Steenburg, Immediate Past President, and J. D. Bradley, Speaker, House of Delegates.

Also present were Drs. R. B. Adams, Geo. W. Covey, Floyd L. Rogers, L. S. McGoogan, Leroy W. Lee, Earle Johnson, J. Perry Tollman, G. E. Peters, K. S. J. Hohlen, H. B. Hunt, J. E. M. Thomson, R. E. Garlinghouse, Orvis Neely, J. D. McCarthy, A. J. Offerman, E. W. Hancock, John T. McGreer, Jr., E. B. Reed, F. Lowell Dunn, Mr. M. C. Smith, Mr. F. C. Asmus and Mr. Dave Powell.

Nominations were called for by the chair for Chairman of the Board of Councilors and Dr. Earl Leininger's name was presented.

A motion was made by Dr. R. E. Harry that the nominations be closed and the unanimous vote of the Council be cast for Doctor Leininger as Chairman of the Board of Councilors. The motion was seconded by Dr. W. E. Wright and carried.

Dr. Paul Read was nominated for Secretary.

A motion was made by Dr. W. C. Kenner that the nominations be closed and Doctor Read declared the unanimous choice of the Council for Secretary. The motion was seconded and carried.

Doctor Leininger stated the next order of business was the adoption of the minutes which had been published in April and July, 1952.

A motion was made by Dr. R. E. Harry that the minutes be adopted as published. The motion was seconded by Dr. W. E. Wright and carried.

The report of the Secretary-Treasurer was called for and Dr. R. B. Adams stated the report and audit was published in the brochure, and that he had nothing further to add.

A motion was made by Dr. W. E. Wright that the report of the Secretary-Treasurer, which included the audit, be accepted, published, and referred to the House of Delegates. The motion was seconded by Dr. J. C. Waddell and carried.

The report of the Executive Secretary, as published in the brochure, was called to the attention of the Council.

A motion was made by Dr. W. E. Wright that the report be accepted, published, and referred to the House of Delegates. The motion was seconded by Dr. R. E. Harry and carried.

Dr. Earle Johnson, in reviewing the report of the Board of Trustees, called the attention of the Councilors to the new investment policy of the association, and to the budget as presented in his written report.

A motion was made by Dr. F. A. Mountford that the report of the Board of Trustees be approved and published; and that the report, together with the budget for 1954, and the amended budget for 1953, be recommended for approval to the House of Delegates. The motion was seconded and carried.

Dr. J. D. McCarthy stated he had nothing further to add to the report of the Delegates to the American Medical Association. He called attention to the fact that the report had not yet been printed.

A motion was made by Dr. W. E. Wright that the report be adopted, published, and referred to the House of Delegates. The motion was seconded and carried.

The report of the Delegate to the North Central Conference by Dr. Floyd L. Rogers was called to the attention of the Council.

A motion was made that the report be accepted, published, and referred to the House of Delegates. The motion was seconded and carried.

A report on the Council on Professional Ethics was called for by the chair.

Dr. Morris Nielsen was not present to give the report, and inasmuch as this report is not published, no action was necessary by the Council.

Three reports were called for; namely, Advisory to Auxiliary, Allied Professions, and Emergency Medical Service. No reports had been submitted, so no action was taken.

The report of the Committee on Hospital and Professional Relations was printed in the brochure and Dr. H. B. Hunt stated he had nothing further to add to this report.

A motion was made by Dr. F. A. Mountford that the report be adopted, published, and referred to the House of Delegates. The motion was seconded by Dr. W. C. Kenner and carried.

Dr. Geo. W. Covey stated the Editor's report was included in the printed brochure and he had nothing further to report; however, he did want to call special attention to the fact he was of the opinion some recommendation should be made relative to handling the manuscript material that is available from the Annual Session. He stated that we lost fifty per cent—perhaps more—of the good material we have at the state meeting because the stenotyped material is not in such shape that it can be used.

General discussion brought the suggestion that perhaps each speaker on the program should be notified in advance that a written manuscript was expected and should be handed in at the time of the meeting. The possibility of the refusal of good speakers on this basis was called to the attention of the group, with an added burden on the program committee in securing good papers.

Doctor McCarthy stated in the mid-west meeting they had not used stenotyped material for a period of 5 to 6 years — that they required manuscripts. Doctor Kelly was of the opinion that the Editor's wish should be seriously considered and whatever pressure could be brought to bear — or whatever ruling could be made — it should be called to the attention of the program committee and that an understanding should be had with the speakers at the Annual Session.

Doctor Covey said they were able to send some of the manuscripts back to the authors and they would rewrite them for publication; however, there were not too many that could be used. He thought any rule made would have to be a lenient one and called attention to the fact that stenotype was the only way to get panel discussion recordings. The question was raised as to the procurement of the service for rewriting these articles, and Doctor Covey stated it could be secured — the American Medical Writers Association have that service — but that it was expensive. Possibly, if we wanted to spend some money, we could take the stenotyped copy and have it rewritten by this service, then have it checked by the author to see if we had changed his meaning in any way, but that it was an expensive procedure.

A motion was made by Dr. Wm. McGrath that the Editor's report be accepted, published, and referred to the House of Delegates. The motion was seconded and carried.

The report of the Medicolegal Advice Committee was given by Dr. J. D. Bradley, Chairman.

A motion was made by Dr. W. E. Wright that the report be accepted. The motion was seconded by Dr. R. E. Harry and carried.

Doctor Adams asked permission of the floor and made the announcement that cocktails would be served in the Persian Room at 12:30 and dinner would be at one o'clock.

Dr. J. D. Bradley read an additional report of his committee on a malpractice insurance study which had been made because of the increased rate recently instituted on a nation-wide basis in this field of insurance.

Mr. M. C. Smith asked for permission of the floor and gave a short resume of the information he had been able to obtain relative to the low experience in Nebraska and the possibility of the forming of an independent company, or starting a department in the Blue Shield organization, for this type of insurance.

It was the opinion of the group that correlation of activities and further study should be made before definite recommendations could be brought to the attention of the House of Delegates.

A motion was made that Doctor Bradley's report be accepted as read. The motion was seconded by Dr. R. E. Harry and carried.

Dr. E. B. Reed gave a report for the Medical Service Committee, reviewing some of the legislation now pending pertaining to the medical profession and medical care in the state. General discussion followed.

The chair called attention to the meeting of the Nebraska Medical Foundation at six o'clock and stated that all Councilors were members of the Board of Trustees of the foundation.

The chair announced a recess for cocktails and dinner, the Council to reconvene again at 2 o'clock.

The Board of Councilors was again called to order by Doctor Leininger, Chairman, at two o'clock.

Discussion was resumed on Doctor Reed's report.

A motion was made by Dr. Paul Read that the Council approve the report of the Medical Service Committee. The motion was seconded by Dr. R. E. Harry and carried.

Dr. D. B. Steenburg reported briefly for the Medical Education Committee, stating that although he had nothing of importance to report in addition to the report given at the special session of the House of Delegates, he would like to urge all the doctors present to go home and visit with the men in the home community and tell them the needs of the medical school; that everyone's help was needed in supporting the College of Medicine.

A motion was made that Doctor Steenburg's report be accepted. The motion was seconded and carried.

The report of the Arthritis Committee was called for but no report was presented.

Dr. Floyd Rogers reviewed the report of the Planning Committee. He stated there was no further progress to report so far as plans for a united fund drive was concerned, but that the committee would continue their study and try to arrive at a workable conclusion. In the matter of blood banks, it was the feeling of the committee that a blood bank on a state level was a necessity so that we can cooperate with other states in a case of great national catastrophe, and that the committee would draft a report for the House of Delegates at the Annual Session.

Doctor Kelly outlined the origin of the request for a united fund and stated he thought it very important that the committee give the problem some intensive study and have a supplementary report for the House of Delegates this year.

A motion was made by Dr. R. E. Harry that the report of the Planning Committee be adopted, published and recommended to the House of Delegates. The motion was seconded by Dr. Paul Read and carried.

The report of the Prepayment Medical Care Committee was read by Dr. Orvis Neely, Chairman.

A motion was made by Dr. W. E. Wright, and seconded by Dr. W. C. Kenner, that the report be adopted, published and recommended to the House of Delegates. The motion carried.

Dr. John T. McGreer, Jr., Chairman of the Public Relations Committee, stated the report of his committee was printed in the brochure and he had nothing further to add.

A motion was made that the report be accepted and published. The motion was seconded and carried.

Doctor Leininger called the attention of the Council to the printed report of the Rural Medical Service Committee.

A motion was made by Dr. D. B. Steenburg that the report be accepted and published. The motion was seconded by Dr. W. E. Wright and carried.

Dr. R. E. Garlinghouse stated that the report of the Committee on Uniform Fee Schedule and Advisory to Governmental Agencies was printed in the brochure. He further stated that the formulary was now in the process of printing and it was their belief that it would be very valuable, not only for the governmental agencies, but for the hospitals and physicians in private practice. He called attention to the appointment of a sub-committee, and stated the committee would appreciate any criticism, additions, or deletions, the members of the association would call to their attention. Doctor Garlinghouse also commented on the years of cooperation and service of Mrs. Harold Prince and Mr. Neil Vandemoer during their term of office at the Board of Control, and suggested that the Councilors write a letter of appreciation for their cooperation with the medical profession during this term of employment; further that a copy of the letter be sent to the Governor of Nebraska.

A motion was made by Dr. R. E. Harry that a letter of appreciation from the Councilors be sent to Mrs. Prince and Mr. Vandemoer. The motion was seconded by Dr. J. C. Waddell and carried.

A motion was made by Dr. R. E. Harry that the report of the committee be accepted and published. The motion was seconded by Dr. J. C. Waddell and carried.

A motion was made by Dr. J. C. Waddell that the Board of Councilors recommend to the House of Delegates that the sub-committee to the Committee on Uniform Fee Schedule and Advisory to Governmental Agencies be made an official part of this committee. The motion was seconded by Dr. R. E. Harry and carried.

The report of the Cancer Committee was called for and Dr. James Kelly stated he had nothing further to report.

A motion was made by Dr. W. E. Wright, seconded by Dr. W. C. Kenner, that the report be accepted and published. The motion carried.

The report of the Cardiovascular Committee was called to the attention of the Council.

A motion was made by Dr. R. E. Harry that the report be accepted and published. The motion was seconded by Dr. Paul Read and carried.

Doctor Leininger stated the report of the Cerebral Palsy Committee was published in the brochure and asked the wishes of the Council regarding this report.

A motion was made by Dr. W. E. Wright, seconded by Dr. W. C. Kenner, that the report be accepted and published. The motion carried.

General discussion followed relative to the policy of permitting committees to draw up resolutions and send them out. It was thought that perhaps some restriction should be placed on this phase of committee activity when it affected the membership as a whole—either by having permission of the Board of Councilors, Board of Trustees, or some interim committee which could pass on the material during the period of time the Council or House of Delegates was not in session. Mr. Smith pointed out that as the By-Laws now stand, the Board of Trustees is set up only to handle financial matters during this interim period, and that even they met only on a basis of every three months.

A motion was made by Dr. Wm. McGrath that this matter be called to the attention of the Committee on Constitution and By-Laws for study, and that perhaps they would be able to present some amendment which would take care of the matter satisfactorily. The motion was seconded by Dr. Paul Read and carried.

The chair stated the report of the Diabetes Committee was published in the printed brochure.

A motion was made by Dr. W. C. Kenner that the report be accepted and published. The motion was seconded by Dr. R. E. Harry and carried.

The report of the Fracture Committee was called for but none had been presented.

The report of the Industrial Health Committee was reveiewed.

A motion was made by Dr. R. E. Harry that the report be accepted and published. The motion was seconded by Dr. J. C. Waddell and carried.

Dr. L. S. McGoogan, Chairman, was asked to present the report of the Maternal and Child Health Committee. He briefly reviewed the printed report and stated he would be glad to answer any questions posed by the Councilors.

Dr. R. E. Harry called for discussion on recommendation No. 3 of the report since such a proposal had previously been rejected.

During the discussion the suggestion was made that if such investigations are undertaken they should be limited to the doctor concerned, or that the doctor should go with the investigator to the hospital. It was pointed out that in some of the smaller towns such investigations might receive unfavorable publicity, which might even originate in the hospital personnel. Another suggestion offered during the discussion was that the word "investigator" was undesirable and that perhaps the term "case reviewer," or some other name should be adopted.

A motion was made by Dr. W. E. Wright that the report be accepted but that Doctor McGoogan should edit the material incorporating the suggestions made and have it ready for reference to the House of Delegates. The motion was seconded by Dr. R. E. Harry and carried.

The chair announced that the reports of the following committees were all published in the printed brochure and asked the wishes of the Council relative to them: Mental Hygiene, Public Health, Tuberculosis and Venereal Disease.

A motion was made by Dr. R. E. Harry, seconded by Dr. J. C. Waddell, that the report of the Mental Hygiene Committee be accepted and published. The motion carried.

A motion was made by Dr. Paul Read, seconded by Dr. R. E. Harry, that the report of the Public Health Committee be accepted and published. The motion carried.

A motion was made by Dr. W. E. Wright, seconded by Dr. J. C. Waddell, that the report of the Tuberculosis Committee be accepted and published. The motion carried.

A motion was made by Dr. W. C. Kenner that the report of the Venereal Disease Committee be accepted and published. The motion was seconded by Dr. W. E. Wright and carried.

The report of the Atomic Injuries Committee was called for and Dr. H. B. Hunt stated he had nothing further to report, but that he would like to call attention of the Council to the fact that his recommendation was that the committee be discontinued.

A motion was made by Dr. R. E. Harry that the report be accepted and published. The motion was seconded by Dr. Paul Read and carried.

Dr. James F. Kelly read the President-Elect's committee appointments for the following year.

A motion was made by Dr. J. C. Waddell that the committee appointments be confirmed. The motion was seconded by Dr. R. E. Harry and carried.

The following names were read by Dr. Paul Read, Secretary of the Board of Councilors, for Life Memberships in the Nebraska State Medical Association:

Adams County—L. W. Rork, M.D., Hastings (now deceased)

Dawson County—H. M. Harvey, M.D., Gothenburg

Fillmore County—V. V. Smrha, M.D., Milligan

Lancaster County—W. L. Albin, M.D., Lincoln and J. B. Williams, M.D., Lincoln (now Phoenix, Arizona)

Lincoln County—E. F. Carr, M.D., Stapleton

Merrick County—Frederick Fouts, M.D., Central City

Omaha-Douglas County — Alfred Brown, M.D., Omaha; H. F. Gerald, M.D., Omaha; Lynn T. Hall, M.D., Omaha; Chas. Hickey, M.D., Bennington; Chas. McMartin, M.D., Omaha; Thomas Torpy, M.D., Omaha

Scotts Bluff—N. H. Rasmussen, M.D., Scottsbluff

A motion was made by Dr. R. E. Harry that the physicians presented from these counties be recommended to the House of Delegates for Life Memberships. The motion was seconded by Dr. J. C. Waddell and carried.

Mr. Smith read two communications pertaining to the Doctor Draft Law from the Spokane County Medical Society, and the Passaic County Medical Society; also a letter from the State Project Chairman of the Muscular Distrophy Associations of American, Inc., and a letter from Mrs. C. Fred Ferciot, Chairman of the Nurse Recruitment of the Auxiliary to the Nebraska Medical Association.

A motion was made by Dr. R. E. Harry that the first two communications pertaining to the Doctor Draft Law, and the letter from the project chairman of the Muscular Distrophy Associations of America, Inc., be referred to the House of Delegates for action. The motion was seconded by Dr. W. C. Kenner and carried.

A motion was made by Dr. W. C. Kenner that the Board of Councilors approve the plan of the Auxiliary to establish scholarship funds for nurses in the Nebraska Medical Foundation, Inc. The motion was seconded by Dr. J. C. Waddell and carried.

Dr. Paul Read read a news release from the World-Herald which pertained to remarks made by Dr. Paul Hawley relative to fee splitting, ghost surgery and unnecessary operations among members of the medical profession, especially in the mid-west.

Several other instances of such releases were called to the attention of the Council. It was suggested that certainly he was destroying good public relations the profession were building up and that some action should be taken immediately to call it to the attention of the American Medical Association and the American College of Surgeons.

A motion was made by Dr. Paul Read that the Board of Councilors should draw up a suitable resolution which should be sent to the American Medical Association and the American College of Surgeons, suggesting that some action be taken against Doctor Hawley's continued practice of vitriolic comments to the press. The motion was seconded by Dr. F. A. Mountford and carried.

Doctor Leininger appointed the following committee to draw a suitable resolution:

Paul Read, M.D., Omaha
Wm. M. McGrath, M.D., Grand Island
R. E. Harry, M.D., York

Dr. J. D. McCarthy asked for permission of the floor and called attention to the televised and radio programs which depict individuals (presumably doctors—white coat, stethescope, etc.) giving professional advice. He stated that as a member of the American Medical Association House of Delegates he had received numerous complaints about it and that it had been taken up with the American Medical Association; however, there was nothing right now they could do about it, but that something could be done by individual physicians if they would petition the Federal Trade Commission to take action on this problem.

A motion was made by Dr. Wm. McGrath that the Nebraska Delegates to the American Medical Association be instructed to present a proper resolution to the House of Delegates of the American Medical Association. The motion was seconded by Dr. W. C. Kenner and carried.

Meeting adjourned.

Deaths

Dr. Arthur V. Wortman. Doctor Wortman was sixty-one years old when he died as a result of a heart attack, in his Pasadena, Calif. home on Febr. 25, 1953. He was born in South Bend, Nebraska, graduated from the University of Nebraska College of Medicine, and practiced his profession in Curtis from 1933 to 1937. The doctor is survived by his wife, Josephine; daughters, Mrs. George Kopcho, Braine, France, and Mrs. Howard K. Kimball, Jr., West Covina, Calif.

Dr. James W. Turner. Doctor Turner died March 6, 1953, at the age of eighty-three. He graduated from the Ohio Medical School in 1893 and practiced in Adams for a short time. He then moved to Sterling where he remained in practice for nearly sixty years. The doctor is survived by a daughter, Mrs. Adelaide T. Rogers of Lincoln; a son, Norman N., of Lincoln, a half sister, three grandchildren and one great grandchild.

Dr. Nathan Dansky. Doctor Dansky died on Febr. 25, 1953, at the age of fifty-six in Los Angeles. He graduated from Creighton University Medical School and practiced medicine in Omaha until he moved to Los Angeles fifteen years ago. He is survived by his wife, Jessie; son, Avrum, Los Angeles; sister, Mrs. I. Krasne, Fremont, Nebraska.

Dr. William Windle Davis. Doctor Davis graduated from the Creighton Medical School in 1909 and practiced in Omaha until he retired in 1950. At that time he moved to Los Angeles where he died on Jan. 3, 1953, at the age of sixty-eight.

DR. McCORMICK'S INAUGURAL TO BE BROADCAST NATIONWIDE

The presidential inaugural address of Dr. Edward J. McCormick will be broadcast nationwide on Tuesday evening, June 2. The program will originate from the Commodore Hotel, New York, during the AMA's 102nd annual meeting. Immediately following the ceremony, a reception honoring the new president will be held in an adjoining ballroom.

Human Interest Tales

Comunications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. C. B. Dorwart, Sidney, has been appointed Cheyenne County Physician.

Dr. B. L. Miller, Loup City, has reported for duty with the Navy at San Diego.

Dr. James Bradley, Omaha, spoke to members of the Omaha Cosmopolitan Club on February 24.

Dr. John E. Hartsaw, formerly of Fullerton, has joined in practice with Dr. K. R. Dalton, Genoa.

Dr. Harry Henderson, St. Edward, announced recently that he is to be inducted into the service shortly.

Dr. George Lytton, Hastings, spoke to a PTA group in Omaha, March 11, on "Mental Health of Children."

Dr. W. M. Morrison, Omaha, has been elected President of the Sioux Valley Eye, Ear, Nose and Throat Academy.

Dr. A. A. Enos, Kearney, has reported for duty with the Air Force at Gunter Air Force Base, Montgomery, Alabama.

Dr. R. L. Cassel, Fairbury, has been inducted into the Navy. He reported March 16 in Detroit where he will be stationed.

Dr. Donald C. Nilsson, Omaha, spoke to members of the Tri-County Medical Society recently on "Care of Premature Babies."

Dr. W. Ray Hill has announced that he will remain in Milford and will not move to Seward as formerly contemplated.

Dr. C. A. Rydberg, Litchfield, was a guest of honor at a birthday party, February 9, sponsored by the local Community Club.

Dr. John Heinke, Scottsbluff, attended a meeting of the American College of Surgeons in Boston during the first part of March.

Dr. John R. Schenken, Omaha, appeared on the program of the College of American Pathologists in New Orleans, February 5.

Dr. E. I. Whitehead, Alliance, and the former Mrs. Mabel Ironberg of Galesburg, Illinois, were married on February 14 in Galesburg.

Drs. Harold Lynch, Roscoe Luce and W. P. Yoachim, Fairbury, have completed the redecorating and modernization of their offices.

Dr. William Fitch, Albion, will report April 15 to Camp Pendleton, California, where he will be assigned to the 3rd Marine Division.

Dr. H. H. Johnson, Lincoln, was recently the subject of a feature story in The Lincoln Star. Doctor Johnson has been in practice 50 years.

Dr. Robert Fitzgibbons, Omaha, recently spoke to the Madison Six County Medical Society in Norfolk on "Management of Varicose Veins."

Dr. Frank Spradling, Lincoln, presented a paper on "How to Keep Mentally Healthy" at a public meeting, February 18, at the Lincoln YMCA.

Dr. Harold Donaldson, Jr., McCook, presided over a panel discussion on "Teenage Problems" at a recent meeting of the local Junior-Senior PTA.

Dr. George N. Johnson, Omaha, Chairman of the medical section of Omaha Civil Defense, spoke to the South Omaha Kiwanis Club, February 12.

Dr. Theodore Jacobson, 1951 graduate of the University of Nebraska College of Medicine, has joined the staff of the Butler Clinic in Hot Springs, S.D.

Dr. D. S. Rosenberg, Franklin, suffered a heart attack during the latter part of February. The Journal wishes him a speedy and complete recovery.

Dr. George J. Lytton, Hastings, spoke to the Nelson Woman's Club, February 10, on a psychiatric topic entitled "Let Your Conscience Be Your Guide."

Dr. Joseph Kuncly, Alliance, spoke on the topic, "Miracle Drugs," when he addressed the local Business and Professional Women's Club on February 16.

Dr. Charles Tompkins, Omaha, discussed the topic, "Where Did Love Go?" when he presented a paper before the Omaha Family Relations Institute on March 5.

Dr. Robert Hanisch has notified his father, Dr. E. C. Hanisch of St. Paul, that he will return to practice there following his discharge from the service April 1.

Dr. K. J. Kenney, Fairbury, spoke to the local Business and Professional Women's Club, March 9, on the topic of hospital requirements for modern medical practice.

Dr. A. H. Webb, Lincoln, recommended to the Lincoln Mental Health Society that the city needs more boarding homes for elderly persons instead of nursing homes.

Dr. John Rogers, formerly of Kimball, has established his practice in Trenton. He is occupying the former offices of Dr. Harvey Hertz, who has been called into the service..

Dr. R. E. Bray, Ponca, has been elected Vice President of the Sioux Valley Medical Society, comprised of physicians from Iowa, Minnesota, South Dakota and Nebraska.

Dr. C. H. Sheets, Cozad, former President of the Nebraska State Medical Association, went to Rochester, Minnesota, during the latter part of February for surgery and skin grafting on his hands.

Dr. I. William Brill, formerly of New York City, is now associated with the Student Health Center of the University of Nebraska in Lincoln. Doctor Brill is in charge of the mental health program.

The Journal extends its most sincere sympathy to Dr. J. E. Ingram, Nelson, on the death of his wife in an automobile accident, February 15. Doctor Ingram was also seriously injured in the crash.

Dr. J. Perry Tollman, Omaha, Dean of the University of Nebraska College of Medicine, spoke to the Omaha Rotary Club in early February on "Legislative Proposals Affecting the College of Medicine."

Dr. Val Verges, Norfolk city physician, recently told representatives of various local civic clubs that the formation of a Community Health Council is vitally important to the city in handling its health problems.

Dr. John C. Baker, graduate of the University of Nebraska College of Medicine, is now practicing with Dr. H. E. Moore and Dr. R. A. Flebbe in Sutherland. Dr. Baker formerly practiced at Hot Springs, S.D.

Dr. Wayne Southwick, graduate of the University of Nebraska College of Medicine, returned from Korea during the early part of March. Dr. Southwick is scheduled to go back overseas after a month's leave at home.

Dr. B. R. Farner, Norfolk, is the new President of the Northeast Nebraska Tumor Clinic. He succeeds Dr. S. H. Brauer, Norfolk. Other new officers are Dr. E. L. Brush, Vice President, and Dr. Pauline Slaughter, Secretary, both of Norfolk.

Dr. Arthur J. Offerman, Omaha, was recently elected Chairman of the Nebraska Board of Examiners in Medicine in Surgery. Other officers elected are Dr. Joseph D. McCarthy, Vice Chairman, Omaha; Dr. J. Marshall Neely, Secretary, Lincoln.

Dr. Val Verges, Norfolk, has been elected President of the Madison Six County Medical Society. He succeeds Dr. John Pollack, Norfolk. Other officers chosen are Dr. A. E. Mailliard, Osmond, Vice President, and Dr. F. A. Bulawa, Norfolk, Secretary-Treasurer.

Dr. G. F. Johnston, Alliance, spoke to the local Chamber of Commerce, February 2, on the medical profession's opposition to socialized medicine. He said that no one had ever suffered from lack of medical care in Box Butte County during his 25 years of practice there.

Dr. F. C. Shook, a 1916 graduate of Creighton University School of Medicine, was a guest speaker at the Industrial Health Conference in Omaha, March 16. Doctor Shook, a retired Army officer, is now medical director for the Owens-Illinois Glass Company, Toledo, Ohio.

Dr. Cecil Wittson, Omaha, was guest speaker, March 9, at a public meeting sponsored by the Grand Island Chapter for the Advancement of Mental Health. Doctor Wittson discussed the work of the Nebraska Psychiatric Unit and its relation to the state's mental health program.

Dr. Harold C. Lueth, former Dean of the University of Nebraska College of Medicine, was the author of an article appearing in The Journal of the Student American Medical Association in January. His paper was entitled: "The Physician in Civil Defense." Doctor Lueth is now practicing in Evanston, Illinois.

Dr. R. E. Johnson, formerly of Wausa, has joined the staff of the Norfolk State Hospital. He had practiced in Wausa 34 years. Before takinng over his new assignment, the Wausa Commercial Club honored Dr. and Mrs. Johnson at a community banquet, at which time they were presented an engraved silver centerpiece.

Dr. P. H. J. Carothers, Broken Bow, is the new President of the Custer County Medical Society. Other officers are Dr. C. H. Rydberg, Litchfield, Vice President, and Dr. Theo. Koefoot, Jr., Secretary. Doctor Carothers succeeds Dr. John Meier, who has moved to Memphis, Tenn., where he is taking a residency in orthopedic surgery.

Dr. Charles Marsh, Valley, spoke to the local Chamber of Commerce, February 9, on the topic: "Medical Aspects of Highway Accidents." Dr. Marsh and Dr. Ralph C. Moore, Omaha, also were guest speakers at the sixth anniversary dinner of the Lincoln-Lancaster Safety Council which was held in early February. Drs. Marsh and Moore strongly recommended that motorists use safety belts, similar to those used on airplanes.

Dr. F. G. Gillick, Omaha, Dean of Creighton University School of Medicine, was the principal speaker at a public meeting in Hastings on February 11. His paper was titled: "Your Doctor's Background." The evening meeting marked the final session of the annual clinical conference of the Nebraska Chapter of the American College of Surgeons. Dr. Herbert Davis, Omaha, presided over the morning session; Dr. D. W. Kingsley, Hastings, was moderator of the evening program. Several Nebraska and Colorado physicians presented clinical papers.

The following notes are taken from Medical Classics, Pol. 1, No. 7, The Williams & Wilkins Company, Baltimore, March, 1937.

Thomas Hodgkin, whose name is still associated with one of the diseases affecting the lymph nodes and spleen, was an English physician who lived from 1798 to 1866. He published many articles and treatises amongst which was that entitled "On Some Morbid Appearances of the Absorbent Glands and Spleen" which appeared in Med.-Chir. Trans., Lond., 17:68-114, 1832.

"Hodgkin, who always appeared in Quaker dress, was a philanthropist and reformer by nature. He was not successful in private practice because of his carelessness in collecting fees and eccentric independence of spirit."

A bibliography of his writings indicates the wide interests which occupied his talents. They begin in 1822 with "On the Uses of the Spleen" and while the major number deal with medical subjects, often with morbid anatomy, the following show how far afield his studies and writings led him:

"An essay on medical education: read before the Physical Society of Guy's Hospital."

"On the importance of studying and preserving the languages spoken by civilized nations, with a view of elucidating the physical history of man."

"On inquiries into the races of man."

"On the stature of the Guanches, the extinct inhabitants of the Canary Islands."

"On the progress of ethnology."

"Narrative of a journey to Morrocco."

Hypertension in the arms associated with hypotension in the legs, is a cardinal sign of coarctation of the aorta.

The Nebraska State Medical Journal

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EDITORIAL

AN EYEWITNESS TESTIFIES

During the last year, two closely related subjects were discussed editorially in the Nebraska State Medical Journal under the titles, The International Labor Organization, and, Government by Treaty. The first of these pointed out that I.L.O. is an integral part of the United Nations and is ostensibly concerned with improvement of conditions affecting the laboring people throughout the whole world. Attention was drawn to the fact that I.L.O. is actually engaged in the nefarious business of trying to socialize the world. Treaties ("Conventions") originated by I.L.O. and ratified by the delegations from member nations are submitted to the governments of those nations. The United States is a member nation, and, if our Senate should ratify such a treaty, it would become the supreme law of our land.

The editorial on Government by Treaty pointed out an apparent weakness in our Constitution. This weak point provides that any treaty, when ratified by our Senate, supersedes the Constitution itself, as well as any state laws that happen to conflict with the terms of the treaty. It can be seen that the Constitution could be thus destroyed and the United States rendered totally socialistic without an actual constitutional amendment, in the usual sense.

In March, 1953, a third editorial quoted and discussed the "Bricker Resolution." This is a resolution introduced into the Senate during the present Congress, designed to amend the Constitution so that "A provision of a treaty which denies or abridges any right enumerated in this Constitution shall not be of any force or effect." This would effectively neutralize attempts to socialize our nation by way of the "back door."

The dangers of the I.L.O. and of Government by Treaty, as well as the pressing need for a constitutional amendment such as would be provided by passage of the Bricker Resolution, are given tremendous emphasis by an editorial that appeared in the Chicago Daily Tribune, March 5, 1953. The following is quoted from that editorial:

ILO DELEGATE AIRS SOCIALIST GOALS

By WILLIAM MOORE

(Chicago Tribune Press Service)

Washington, March 4 — W. L. McGrath didn't have much schooling. He got a job in a Cincinnati furnace factory and worked his way up to the presidency.

That's why he said he'd have to speak sixth grade language when he came before a senate judiciary subcommittee today to tell his inside story of the international labor organization.

Because of his success in business, he had quite unexepectedly become vice chairman, four years ago, of the American employer delegation to the international organization that sits in Geneva, although he said he had no experience in foreign affairs.

NOT TIRED OF U.S. MONEY

He had sweat to understand what the diplomats were talking about in Geneva, he explained, but he had found out, and it was this:

1. ILO is not a labor organization at all, but an association of nations bent on socializing the United States and all the world in a program that rivals that of its affiliate, the United Nations.

2. Its members are "sick and tired of us," but want 40 to 50 billion dollars of American taxpayers' money.

3. Entering by the back door, its social planners hope to impose socialized medicine and compulsory health insurance, destroy the insurance companies, and nationalize industry.

4. Its plans include government benefits for practically "all the ills the flesh is heir to," but all women would be expected to work, in return for which they would have time off, with pay, to nurse their babies, with government pay for mothers' milk or a government allowance for bottle feeding.

SOCIALISTS IN CONTROL

5. Its "socialist thought planners" dominate the organization, and American government and labor

delegates vote with them on almost every issue, giving foreigners the impression that the United States is entirely in favor of the socialist state of tomorrow.

6. The ILO has taken up where Mrs. Eleanor Roosevelt left off in the U.N., where she sponsored the so-called human rights program.

"You're just appalled by it all," McGrath told Senator Langer (R., N.D.), committee subcommittee chairman, Senator Dirksen (R., Ill.), Senator Butler (R., Md.), and Frank Holman, former president of the American Bar association.

BACKS BRICKER AMENDMENT

McGrath told his story in support of the proposal of Senator Bricker (R., O.), for a constitutional amendment forbidding treaties or international agreements permitting the U.N. to interfere in American domestic life.

Knowing they cannot impose their ideas on the United States through direct legislation, McGrath said, the ILO planners hope to do it by "sneaking through the back door" with treaties and agreements.

"Unless the loophole in our Constitution is plugged," he testified, "they might be able to get socialism by treaty."

YOUR MEDICAL JOURNAL

A state medical journal should be the mouthpiece of the members of the state association; it should bring to them what they like to read; it should be informative and enjoyable. On the other hand, its function is different from that of journals of national rank and distribution. The latter are avenues of communiction for information of a different character. Papers requiring wide distribution, articles by persons of national or international reputation or by authors connected with great institutions gravitate to publications which will give national prominence to what they print.

Your journal can and should be of as great importance to you as are the "big" journals, because you own it; because you can speak to your neighbors through its pages; because it keeps you in friendly touch with your fellow doctors. It tells you what they are doing in professional activities as well as in things of lighter vein. It informs you when they get married, when they have babies, and when they go on vacations or to medical meetings. Finally, it tells you when they die.

The Nebraska State Medical Journal brings you information of a scientific nature. This is largely written by Nebraskans but there is a sprinkling of good articles by men of national prominence. Occasionally one of your acquaintances chooses to use your journal to record results of original research. The scientific articles are not stereotyped rehashes of text books. For the most part, they are instructive, well written papers from which one may learn something of importance.

Last year the Journal contained 412 pages of printed material not including the advertising section. Two hundred and twenty-three of these pages were occupied by seventy-two scientific articles. These papers dealt with general medicine, general surgery, several of the surgical specialties, pathology, clinical pathology, neuropsychiatry, and obstetrics and gynecology. Articles on general subjects and technical matters relating to medicine, politics, economics, and others were also presented. Careful reading of the material in these categories, published in your own journal, will keep you well informed.

One hundred and eighty-nine pages were devoted to selected material designed to keep you in touch with medico-political fields, economics as related to medicine, the activities of the American Medical Association, and opinions of medical and lay persons which might affect medicine in its various facets. Under headings of News and Views, Announcements, Organization Section, and News From Your Medical Schools, every effort was made to keep you informed of the past, the present and the future.

Please remember that the Nebraska State Medical Journal is your journal. If you have any constructive criticism of it, believe that you can suggest ways and means to improve it, or wish to have its make-up changed in any way you think may enhance its value, your suggestions will be welcome.

LAST CALL FOR PALACE!

This June may be your last chance to wander at will through New York's Grand Central Palace! The AMA's scientific and technical exhibitions will be one of the last of the "private" meetings to be held there. Some time in the fall the Palace will be taken over by the U.S. Bureau of Internal Revenue for office space. The 1953 Technical Exposition will feature displays from more than 350 manufacturing, drug and publishing firms, while the Scientific Exhibit will present approximately 260 clinical and diagnostic exhibits.

A continuous murmur in the second and third intercosal spaces at the left of the sternum, with systolic accentuation, is a cardinal sign of patient ductus arteriosus.

Headache*

A PANEL DISCUSSION

From the Standpoints of Various Medical Specialties

JAMES J. O'NEIL, M.D.; W. H. MORRISON, M.D.; ARTHUR M. GREENE, M.D.;
W. RILEY KOVAR, M.D., and ROBERT S. WIGTON, M.D.
Omaha, Nebraska

These authors, representing five special fields of practice, call attention to a common symptom that is encountered by every practitioner—headache. The mechanisms of production, methods of determining the underlying condition, and the means of treatment are adequately considered. The non-specific nature of this symptom is suggested when a single type of headache is considered by specialists in several categories of practice.

EDITOR

HEADACHES FROM THE STANDPOINT OF THE OTOLARYNGOLOGIST

JAMES J. O'NEIL, M.D.

INTRODUCTION

One of the most common complaints in medicine is that of headache. While basically the term means intracranial pain, common usage has included any pain, neuralgia or neuritis of the head. It is imperative to remember that headache is not a disease but only a symptom which may be due to either pressure within or without the cranium, or to some systemic or psychic disorder.

Since the complaint of headache may indicate a minor or a serious disturbance, knowledge of the many causes that give rise to this symptom is essential for one who would treat headache. We should like to present a practical classification of headache, the conditions in the ear, nose, and paranasal sinuses responsible for it and what can be done from a diagnostic and therapeutic standpoint.

CLASSIFICATION

In a subject so large as headache we believe it is helpful to have a practical classification based upon the organ or region involved.

I. Local Head Disorders
    1. Ear, Nose, Paranasal Sinuses
    2. Ocular
    3. Intracranial
II. Systemic Disorders
    1. Infectious Disease
    2. Circulatory Abnormalities
    3. Blood Dyscrasias
    4. Gastrointestinal Disorders
    5. Gynecological Disorders
    6. Miscellaneous
III. Neither Local nor Systemic
    1. Migraine
    2. Histamine
    3. Emotional

Of the local head disorders responsible for headache, disturbances in the ear, nose, and paranasal sinuses are frequently found to be the causative factors. We shall list the conditions under each which have been found responsible for headache and then briefly discuss how one can make the diagnosis and what one can do about it.

I. Ear
    A. External
        1. Foreign body
        2. External otitis
        3. Perichondritis
        4. Furunculosis
    B. Middle
        1. Otitis media
        2. Mastoiditis
    C. Inner
        1. Labyrinthitis
II. Nose
    A. Rhinitis
        1. Infectious
        2. Allergic
    B. Anatomic
        1. Septal deviation
        2. Hypertrophied turbinates
III. Paranasal Sinuses
    A. Infectious
    B. Allergic
    C. Neoplastic

DIAGNOSIS

In making a diagnosis as to the cause of headache in which an ear, nose, or paranasal origin is suspected, the history is frequently of more importance than the local findings. Obtain from the patient a complete history by determining: family history; what the patient means by headache; when it first occurred; onset time; frequency; intensity; character; duration; cause of onset; location; scotomata; photophobia; vomiting; nausea; vertigo; rhinorrhea; lacrimation; nasal drainage; termination, and tenderness.

Headache due to aural disease is localized to the temporal, parietal, or postauricular area on the side involved.

Foreign bodies lodged in the external auditory canal producing such a localized headache are generally seen in infants and young children. Movement of the external ear will produce an aggravation of the pain complained of. Inspection of the external canal will reveal the foreign body. Removal of the object, most easily accomplished, in youngsters, under a general anesthetic, will result in a rapid clearing of symptoms.

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*Read before Omaha Mid-West Clinical Society, October, 1952.

External otitis, perichondritis and furunculosis of the external ear as a cause for headache have been seen in older children and young adults. The history, plus inspection of the ear canal which reveals marked swelling, tenderness on motion, and acute pain on inward pressure upon the tragus readily establish the diagnosis. Careful cleansing and local medicaments to the ear canal together with antibiotic therapy will result in early clearing of the external otitis and furunculosis. Perichondritis is best treated by x-ray therapy which has proved most effective.

The middle ear and mastoid must always be considered in any complaint of unilateral headache. In acute otitis media the history, otoscopic examination revealing a red bulging membrana tympani, and decreased hearing for whispered and conversational voice, readily establish an early diagnosis. Early myringotomy and antibiotic therapy result in prompt subsidence of symptoms and clearing of the underlying pathology.

Improper or incomplete management of the simple acute otitis media will result in a lingering chronic otitis media and mastoiditis. While neither pain nor headache is characteristic of this chronic otorrhea, an acute exacerbation of the process is frequently accompanied by a severe unilateral headache with marked vertigo, nausea, and vomiting, and a cessation of discharge. In these cases the bone destruction has progressed into a labyrinth and the patient has a labryinthitis and endocranial extension. Diagnosis can be confirmed by the fistula test in which sudden pressure is made on the tragus, suddenly released, and the resulting nystagmus noted immediately. These cases demand prompt surgical intervention.

NOSE

Rhinitis, either infectious, as in acute coryza with intense nasal congestion, redness and edema, or allergic, as in the hay fever victim with marked pallor and bogginess of the nasal mucosa frequently can be the cause of headache. Inspection of the nasal mucosa can be supplemented by the preparation of a smear of nasal secretions, stained by eosin-methylene blue and studied for a preponderance of neutrophils or eosinophils in order to confirm the diagnosis of infectious or allergic rhinitis. In either, prompt symptomatic relief can be obtained from simple shrinkage of the edematous mucosa with a nasal decongestant. A therapeutic trial of one of the antihistaminics followed by a series of skin tests with the inhalent group of allergens should be carried out to afford the allergic patient some form of permanent relief.

Anatomic abnormalities causing internal derangements of the nose such as septal deviations or hypertrophied turbinates do not cause headaches unless there is a superimposed rhinitis which causes marked edema of the nasal mucosa to produce a point of contact between the septum and turbinates or interferes with the normal aeration and drainage of the sinuses. In these cases simple shrinkage or cocainization at the point of contact will establish the diagnosis and afford prompt relief from this congestive or contact type of headache.

PARANASAL SINUSES

As in acute rhinitis it is generally accepted that in sinusitis with suppuration the most important diagnostic and therapeutic measure is the adequate drainage of any accumulated pus and ventilation of the sinus involved. The headache promptly subsides and disappears when drainage is established. The positive findings of nasal congestion, edema, inflamed mucous membranes, discharge, temperature elevation, tenderness over the sinus involved, opacity on transillumination, and x-ray findings confirm the diagnosis. Treatment consists of shrinkage, drainage, and aeration of the sinus involved together with heat, antibiotics and analgesics. In chronic suppurative sinusitis headache is present only at times of acute exacerbation when drainage is blocked.

Neoplastic sinus disease may be either benign as in polyps or mucoceles or malignant as in carcinoma. The history of headache in these cases is constant and progressively worse. Diagnosis is made by local disfigurement, x-ray findings, and biopsy. Treatment is surgical in the benign lesions, with radical surgery and x-ray therapy indicated in the malignant lesions.

SUMMARY

In summary, then, from an otolaryngological standpoint, one searching for a cause of headache in the ear, nose, and paranasal sinuses must have a knowledge of the many causes of this symptom. He must obtain a careful and complete history and utilize inspection, palpation, hearing tests, smear studies, x-ray findings and the therapeutic tests of simple shrinkage or cocainization in cases of congestive or contact headaches and drainage and ventilation in cases of suppuration within any of the sinuses.

HEADACHE FROM THE STANDPOINT OF THE OPHTHALMOLOGIST

W. H. MORRISON, M.D.

A high percentage of the patients who consult the ophthalmologist complain of headache. Proper evaluation of the cephalalgia entails considerable knowledge of ocular pathology as well as cognizance of the eyes' ability to reflect systemic disease. Pain in the eye and the adjacent area falls into three categories: (1) pain in the eye as a result of local eye disease; (2) pain in the region of the eye as a result of local eye disease; and, (3) pain in the region of the eye as a result of remote disturbance.

IRITIS

The pain of acute iritis may be localized directly in the eye as though a sharp instrument is being thrust into the globe or the pain may be a spasmodic chronic neuralgia superimposed on a dull frontal ache. The pain may not be localized but occasionally radiates over the distribution of the fifth nerve to the brow, malar region and cheek but rarely to the nose and teeth. There is an associated photophobia and lacrimation. The involved eye appears red, the pupil small, the cornea dull, and the vision is blurred.

CORNEAL FOREIGN BODY AND ULCERATION

A foreign body on the cornea, if neglected, may result in ulceration. Corneal ulceration has, associated with it, local eye pain and frequently an accompanying iritis with pain radiating over the distribution of the fifth nerve. Inspection of the cornea, particularly after it has been stained with fluorescein, reveals the origin of the pain.

GLAUCOMA

The symptoms of chronic, noncongestive glaucoma are vague and indefinite. The disease develops insidiously and the patient may only learn that there is an ocular involvement by suddenly discovering that one of his eyes is blind.

Congestive glaucoma (narrow angle) in its early stage carries with it low grade ocular pain associated with the seeing of halos. The pain is unilateral, often occurring at the end of a day when the patient is tired, worried and perhaps has been under tension. Later, the attacks become violent and turbulent with the pain becoming more severe, radiating along the distribution of the fifth nerve usually involving the frontal region and jaw. Associated with the pain is profuse lacrimation, marked loss of vision, lid edema, steamy cornea and a dilated, inactive pupil. If the eye is palpated it is found to be extremely hard. Often, associated with the glaucoma, are the constitutional symptoms of prostration, nausea, vomiting, and perhaps diarrhea. The pulse becomes irregular and there may be pallor with cold extremities or a flushed face with a rise in body temperature. Because of the constitutional symptoms which accompany the acute onset of glaucoma, a diagnosis of a gastro-intestinal upset may be made rather than recognizing the true origin of the symptoms as being in the eye.

REFRACTIVE ERRORS

Myopic individuals rarely have headache on the basis of a refractive error. They occasionally complain of a tiredness of the face and frontal region as a result of contorting the face and narrowing the lids in an effort to obtain better vision. Such a complaint occurs after long periods of watching a movie, television program or blackboard work. The headache of uncorrected hypermetropia or of an astigmatic error usually comes on after long use of the eyes particularly at the near point and begins as a sensation of heaviness in the region of the eye and frontal area which gradually becomes more severe. The headache has been described as dull, bursting, sharp, throbbing and even lancinating. The headache that develops as a result of uncorrected refractive errors of hyperopic and astigmatic type usually recedes after the eyes have been rested. The headache rarely if ever develops during the night but may be present in the morning after a prolonged period of reading the night before. This often accounts for the so-called "Monday morning headache" which occurs after an unusual amount of reading over a weekend.

Individuals with imbalances of the extraocular muscles complain of pain in the supraorbital region and in the temples particularly after use of the eyes. The headache is frequently associated with dizziness and may be brought on by reading, riding on a train, watching a ball game or a motion picture. The headache is sometimes designated as "panoramic" or "shopper's headache." It is relieved by rest, proper muscle training (orthoptics) and occasionally by the grinding of prisms in the patient's glasses or by surgery.

MIGRAINE

By far the most common complaint of severe headache as seen by the ophthalmologist originates because of an unrecognized migraine. If a careful history is taken there usually is a strong familial background of headache. The patient is often disturbed by the aura that precedes the hemicrania and may believe that it is a symptom of a brain tumor or some severe systemic disease. These headaches occur after states of tension or as a result of dietary indiscretion or because of an allergy to certain foods. The prodrome is that of a central scotoma followed by scintillations described as seeing heat waves or flashes of light. As these recede there ensues a severe, constant, sickening pain just back of the eye. The most beneficial treatment is a full discussion of the problem of migraine with the patient.

HERPES ZOSTER

The pain that heralds herpes zoster is a sudden, constant, severe neuralgia which is usually confined to the distribution of the first division of the trigeminal nerve. Nausea and vomiting with general discomfort is frequently associated with the pain. Three to four days after the onset of the pain a blushing of the skin occurs followed by the development of the diagnostic vesicular dermatosis. The eye must be vigilantly watched for complications particularly that of keratitis.

Hutchinson's rule purports that eye trouble (keratitis) usually accompanies a vesicular involvement of the side of the tip of the nose. This consecutive nasal - corneal involvement is due to nasociliary nerve irritation. Specific, energetic ocular treatment must be instituted if useful vision is to be retained.

BRAIN TUMOR

The headache of increased intracranial pressure may be bursting in type and aggravated by coughing, straining, and stooping. It is not relieved by rest, sleep, or the usual headache remedies. There may be associated with it, particularly in the late stages, projectile vomiting, and manifestations of neurologic disease. An examination for ocular motility, pupillary change, and the taking of a form field is important. Familiarity with the ophthalmoscope enables one to properly evaluate the eye grounds. The finding of papilledema ordinarily is an indication of increased incranial pressure. As a differential point, a patient with a choked disc has little difficulty with central vision until late, whereas optic neuritis which may be confused with papilledema, carries with in an early profound loss of central visual acuity.

SUMMARY

When the patient complains of headache, take a careful history and do not fail to look at and into the eyes. Be hesitant to blame the eyes if the headache is of recent origin or has existed from childhood.

HEADACHE FROM THE STANDPOINT OF THE INTERNIST

ARTHUR M. GREENE, M.D.

In the course of obtaining histories of patients with all types of illnesses, it is unusual to find one who denies suffering from headaches. Very frequently headache is the main complaint, and the physician's responsibility is to find the cause of the headache and advise appropriate treatment.

The description of the headache is a useful tool in classification of its type. The interrogator must ascertain if the headache is localized or generalized, lateralized or symmetical, and, if recurrent, whether it follows a typical pattern of progression. The type of pain may be sharp, shooting, throbbing, dull, aching or just a pressure or tight-band feeling. It may be associated with a sense of posterior neck muscle tightness, nausea, nasal blockage and discharge, photophobia, lacrimation or malaise. The duration of pain may vary from a few seconds to continuous distress. The time of day of peak distress, the measures used for relief, the effect of the headache on sleep, and the prodromes or residual symptoms are all worthy of note.

In the field of internal medicine the following sources of headache are most frequently encountered:

1. Headache is often associated with acute or chronic infections. Fever is a usual but not an invariable factor in its causation. Associated symptoms and findings of infection such as leukocytosis, elevated sedimentation rate, positive serologic and agglutination tests, malaise and weight loss are but a few of the criteria that lead to the diagnosis. Headache may be the only symptom of secondary syphilis. Appropriate treatment of the infection alleviates the headache.

2. Hypertension from any cause frequently gives rise to headaches. However, patients with severe hypertension may not complain of headaches, while many who have mild hypertension consult the physician primarily because of head distress. Strangely enough, therapy for the hypertension such as sympathectomy or the newer autonomic blockaders may relieve the headache without especially benefiting the hypertension. The hypertensive headache is frequently worse upon arising and is better as the patient moves about. This morning headache may be alleviated by having the patient sleep with the head of his bed elevated. Hypertensive headaches are frequently occipital and unrelieved by salicylates. The diagnosis is made by checking the blood pressure, and appropriate studies to determine the cause of the hypertension are indicated.

3. Migraine headaches are usually found in perfectionistic individuals having rigid personalities. They frequently follow emotional upsets, increased work loads, overindulgences in food or alcohol, and inadequate rest. Frequently, a family history of "sick" headaches and occasionally, a personal or family history of allergy is obtained. The headache is periodic, usually lateralized, intense and disabling, and is associated with gastrointestinal upset, scotomata, photophobia, hyperacusis, and extreme exhaustion. Aura consisting of scintillating scotoma or of peripheral paresthesias frequently precede, and exhaustion follows a typical bout. It is usually found in adolescents and those in middle life, and lessens in frequency and intensity in the forties. Ergot preparations to prevent intra- and extracranial vascular dilatation may abort the attack if given early. In the prevention of these headaches, the elimination of rigid time schedules, nervous tension, overindulgences, overwork, inadequate rest and, in a few patients, food allergens may be helpful. Psychotherapy should be given to the patients with intractable migraine.

4. Allergic headaches are often associated with other allergic manifestations in the individual or his blood relatives. They may mimic any other type of headache but are relieved only by the elimination of the causative allergen or by desensitization to it. The keeping of food charts, analysis of environmental allergens, and the knowledge of the causation of other allergic manifestations are helpful in discovering etiologic factors.

Histaminic cephalagia is an anaphylactoid reaction manifested by sudden and severe unilateral headache. Although rare in occurrence, this headache is typical in regard to signs and symptoms. It occurs in patients hypersensitive to histamine and is due to dilatation of large intracranial and extracranial blood vessels. The onset of the headache is sudden, it lasts about one hour and subsides quickly. It usually is nocturnal and is most often found in middle-aged or older men. Lacrimation and ocular redness, rhinorrhea or plugging of one nostril, and localized sweating around the involved eye are characteristic. Attacks may be precipitated by subcutaneous injection of 0.35 mg. of histamine which causes a mild headache in a normal individual but a severe and typical headache in one with histaminic cephalgia. Intravenous ergotamine terminates the attack, but of more importance is the prevention of future attacks by desensitization using gradually increasing doses of histamine, given subcutaneously, finally maintaining the dose just below that which causes headache.

5. Localized headaches that occur in those past middle life occasionally are caused by temporal arteritis. This is a disease involving the temporal arteries and frequently the central artery of the retina. Involvement of the latter often leads to blindness. The disease is accompanied by fever and palpably tender temporal arteries, and may be a part of a general vascular aberration, hence the prognosis must be guarded. Biopsy of involved arteries reveals typical pathologic changes. Excision of a strip of the diseased artery may relieve the headache.

6. Pain in the nape of the neck spreading upward to the occiput and down to the upper thoracic spine and shoulder tops is frequently called "headache." Such symptoms are noted in cervical arthritis and more common-

ly myofibrositis of the posterior neck. The pain is precipitated by exposure to drafts, chilling or by holding the head in one position for a long time, and is exacerbated by extreme motions of the head. Tender fibrositic nodules may be felt and similar pains may be complained of from other musculoskeletal areas of the body. "Tension" headaches of psychogenic origin are difficult to differentiate from this disease and frequently co-exist.

Cervical traction, local heat, massage and muscle relaxants such as Tolserol frequently relieve the acute attack but recurrences are common, and often associated with weather change.

7. Although the diagnosis of headache is usually not emergent, headache caused by meningeal irritation is the first sign of a potentially fatal disease. Fortunately, the headache is of a severe nature, the patient demands immediate attention and the physician is quickly alerted as to its gravity. The pain occasionally causes crying and sweating and the body temperature is elevated. Any motion of the head or shaking of the bed exacerbates the pain. Photophobia is usually present.

From an objective standpoint, the examiner notes that the head is usually maintained in the extended position, the hips and knees are flexed and the back is frequently arched. Nuchal rigidity with positive Kernig and Brudzinski signs corroborate the initial impression of meningeal involvement and lead the physician to the diagnostic lumbar puncture. Culture and smear studies of the fluid, cell count, and sugar and chloride levels usally lead to the bacterial cause of headache and to immediate administration of appropriate chemotherapeutic or antibiotic medication.

8. The headache from fatigue of excessive emotional and mental strain is easily diagnosed by the physician or the patient after a thoughtful discussion of his complaints. The alleviation of the precipitating cause is usually not as easy and requires sympathetic discussion and at least superficial psychotherapy.

9. Perhaps the most dramatic headache is the one caused by spontaneous subarachnoid hemorrhage. Its onset is so sudden that the patient frequently thinks he has been hit on the head. Sudden loss of consciousness and the painful awakening with a severe headache is frequently seen. Meningeal signs and intractable vomiting and retching are common, but no localizing neurologic findings are found. Since the cause is rupture of a miliary congenital aneurism of the Circle of Willis, or rupture of a vessel through a weakened arteriosclerotic plaque, blood permeates the spinal fluid and lumbar puncture reveals a grossly bloody fluid under increased pressure. Removal of some of this fluid gives temporary or lasting relief. In younger patients arteriograms to localize the bleeding also may be indicated, since ligation of the ipsilateral carotid may prevent recurrences of this frequently fatal process.

10. Last, headache caused by anemia is vague and, by itself, not diagnostic. It is probably due to cerebral hypoxia and is therefore similar to headache associated with ascent to high altitude. The treatment is the appropriate therapy of the anemia, and the diagnosis depends on a thorough history, physical examination and appropriate laboratory work. Indeed, such medical surveys must be made to diagnose and properly treat all types of headaches.

HEADACHE FROM THE STANDPOINT OF THE GYNECOLOGIST

W. RILEY KOVAR, M.D.

Since headache frequently makes its appearance premenstrually, during menstruation, in the menopause or accompanies actual symptoms referable to the reproductive system, the gynecologist is often consulted in regard to this symptom. In spite of this frequent association it must be re-emphasized that disease of the cervix, uterine body, fallopian tubes, the ovaries or the external genitalia, is not directly responsible for the headache.

The female patient who presents herself with headache as the chief symptom is a problem, in the majority of cases, that does not fall within the realm of gynecology. However, when headache is one of a group of symptoms of equal importance and associated with other gynecologic signs and symptoms of equal—and at times of greater — importance, the problem is one for the gynecologist.

Headaches that fall into this classification are as follows: 1. Those that occur during the childbearing age, associated with symptoms referable to the reproductive and other organ systems. 2. Headaches associated with the menopause. 3. Those accompanying premenstrual intoxication, which includes several conditions, often described separately, such as premenstrual tension, premenstrual edema and the so-called menstrual toxemia(1). 4. Headache due to pituitary derangements.

HEADACHE DURING THE CHILDBEARING AGE

The gynecologist sees a relatively large number of female patients in the childbearing age, who report for treatment of conditions for which no organic basis can be found. Many are "high strung" individuals who burn up all their energy under the stress and strain of our modern life and live under the influence of phobias and/or an unhappy marriage. Complaints referable to the reproductive organs, to other organs and organ systems such as dysmenorrhea, dyspareunia, frigidity, menstrual irregularities, nervousness, fatigue, repiratory symptoms, cardiac, gastrointestinal and urinary disturbances — alone or in combination — may be the result(2). The complaint of headache is no exception in these same patients.

When all procedures necessary to establish the functional nature of their condition have been carried out, taking time to have a heart to heart talk with the patient is well worth while. In many cases one will be surprised to find that, by asking the patient point blank what she really came in to see you about, the basis for her numerous complaints will be revealed. Time does not permit discussion of the various possible revelations obtainable through this approach.

Practical psychotherapy plus central and autonomic neurosedation *(Bellergal(R), 2 to 4 tablets daily) will often alleviate their distress(2).

It is stressed that gynecologic procedures, such as perineorrhaphy, anterior and posterior colporrhaphy, cervical conization, uterine suspension and others, should not be done with the assurance that the patient's functional symptoms will be alleviated.

By no means should these young women, or those who are approaching the "twilight" of their reproductive life, be told that their symptoms are due to "change of life" thus committing them to the promiscuous use of estrogen pills or "shots."

HEADACHE ASSOCIATED WITH THE MENOPAUSE

The onset of the menopause is ushered in by well-known signs and symptoms which usually occur in a woman in her middle forties. Headache is a prominent symptom. The immediate endocrine cause of the symptoms of the climacteric is probably the gradual diminution of estrogen. Therefore, most women in the middle forties, or older, exhibiting signs and symptoms of the menopause, are put off with some hormones — thereby neglecting the fact that the vegetative nervous system plays a major precipitating or aggravating role in the production of such symptoms. Decrease in ovarian function produces severe stress and strain of the autonomic nervous system, and on all body systems as well(3, 4, 5).

It is to be emphasized that hormonal therapy plays only a minor role in the management of the menopausal patient. Furthermore, endocrine therapy is not indicated in all cases and the continued, uninterrupted, injudicious use of estrogens carries with it certain hazards and is often-times dangerous(6, 7). Vaginal bleeding that occurs during estrogenic therapy should not be regarded as hormonal withdrawal bleeding until diagnostic dilatation and curettage rules out the presence of uterine malignancy.

The proper management of the menopause can best be summarized by the following quotations: Rogers says(8) "The best therapeutic results will be achieved by the physician who directs his attention to the changing emotions rather than to the endocrine system." Novak concludes(9) "One does not treat the menopause but the particular woman who happens to be going through the menopause, with all her problems of body, mind and soul."

PREMENSTRUAL TENSION

This is a symptom complex which begins about 10 to 14 days premenstrually, reaches its peak shortly before menstruation and disappears dramatically after the onset of the menstrual flow. In addition to headache, it is characterized by a feeling of mild depression or anxiety, and is associated with other symptoms such as insomnia, emotional instability, fatigue, painful swelling of the

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*Bellergal, (R) a combination of ergotamine tartrate, belladonna and phenobarbital. (Sandoz Pharmaceuticals, New York).

breasts, increased appetite, low abdominal pain, abdominal bloating, nausea with occasional vomiting and, rarely, increased libido.

The etiologic factor points to an estrogen-progesterone imbalance with a relative excess of estrogens in an inactivated or unantagonized form(1, 10-13).

The concept that water and sodium ion retention may be induced by the high premenstrual estrogen content of the blood has been demonstrated by the work of Thorn(14). The various symptoms develop as the result of an associated increase in extra-cellular fluid resulting in edema of the brain, intestines and other specific organs affected.

Upon this was based the premenstrual ammonium chloride therapy with limitation of salt intake, instituted by Greenhill and Freed(15). This treatment is begun two weeks preceding menstruation, and has been employed with usually good results. Satisfactory results have also been reported with the use of progesterone and vitamin B(13).

HEADACHE DUE TO PITUITARY DERANGEMENTS

Pituitary disorders produce headache but these patients usually come to the gynecologist because of menstrual disturbances, particularly amenorrhea.

Adiposogenital Dystrophy (Froehlich's Syndrome): This condition is the result of a functional disturbance of the pituitary-diencephalon area. Headache may be temporal, frontal, or pancranial. However, the chief complaints of these placid patients are usually amenorrhea and obesity. The mammary-mons-girdle type of obesity is classical and distinctive. Under-development of the genitalia, hypertrichosis with male distribution of pubic hair, and minor defects of visual fields, are other physical findings.

Diagnosis depends upon the correlation and evaluation of symptoms together with physical signs and laboratory findings. Treatment is directed to relieve amenorrhea, obesity and hypertrichosis(16, 21).

Pituitary Adenomas: These tumors produce symptoms as the result of intrinsic hormonal derangements, pressure on neighboring structures or both. They are of three types: the chromophobe, basophil and acidophil. When large enough to produce pressure on the optic chiasm, headache, optic atrophy and contraction of the temporal visual fields are the result (chiasmal syndrome(16, 20)).

The chromophobe adenoma, when suprasellar, does not disturb the menstrual cycle and produces chiefly the chiasmal syndrome. However when the tumor is intrasellar, amenorrhea and associated sterility, progressive optic atrophy — eventuating in bitemporal hemianopsia and total blindness, headache and roentgenographic evidence of sellar distortion — are the result(17).

Progressive contraction of the visual fields and roentgenologic "ballooning" of the sella tursica establish the diagnosis. Treatment consists of a trial of irradiation therapy before resorting to surgery—unless the visual fields indicate immediate surgical removal (18).

The basophil adenoma produces Cushing's syndrome — though it must be remembered that tumor of the adrenal cortex may also produce this syndrome, and, the two must be differentiated. Pituitary basophilism, as it is frequently called, is characterized by a rapid gain of fat on the face (moon-faced), neck and trunk, often called "buffalo" type of obesity. Other symptoms are amenorrhea, hirsutism and purplish abdominal striae. Also observed are hyperglycemia, glycosuria and hypertension. Therapy consists of intensive roentgen irradiation of the pituitary gland(19, 20).

Acidophil adenoma of the anterior lobe of the pituitary produces either giantism or acromegaly — depending upon whether it makes its appearance in pre-adult life before the epiphyses have closed, or in adult life, when linear elongation of the skeleton is no longer possible because of completed ossification of the epiphyses(16).

Acidophilic adenomas respond to roentgen ray irradiation. Operative removal of the growth is the procedure of choice when optic atrophy and blindness are threatened.

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HEADACHE FROM THE STANDPOINT OF THE NEUROLOGIST AND PSYCHIATRIST

ROBERT S. WIGTON, M.D.

I. Headaches due to structural alterations in the nervous system.

Headache is so common and so commonly chronic and not urgent, that alertness for "red flag" headaches indicating serious and frequently urgent organic pathology in the nervous system, has an importance out of proportion to its relative infrequency. In many of the following conditions, headache constitutes the important clue in a case where the general practitioner has the particular function of early detection of a serious condition. In brain tumor, brain abscess and subdural hematoma, especially, the practitioner's alertness may well be the deciding factor between life and death.

BRAIN TUMOR

The headache may be deceptively mild at first, but is usually progressively severe. It may vary more than one would expect with a static mechanical pathology as its cause. The headache is commonly present in the morning, and is aggravated by straining, coughing and anything that may increase the intracranial pressure. Vomiting may not be present, especially in the early stages when it is desirable to detect a brain tumor. The chief need is to be aware of the possibility and look for associated signs. These are mild neurological changes in the limbs or in the cranial nerve functions, a general dullness or somnolence, vague personality changes, disinterest, and fatigability. These associated symptoms are apt to come and go with the headache, and the headache, when severe, is apt to mask the other symptoms. The headache in this way may act as a "red herring." Upon suspicion, the patient should have a neurological examination with special attention to the eyegrounds. Electroencephalography can be of help in a doubtful case. Further studies by the neurologist and neurosurgeon include pneumoencephalogram, arteriogram, ventriculogram and trephine.

INFLAMMATORY DISEASES
MENINGITIS

Headache is usually severe and the diagnosis usually does not constitute a major problem in an acute pyogenic meningitis. A markedly stiff neck may be the most significant finding on examination, and a lumbar puncture confirms the suspicion.

In milder or subacute meningitis, there may be a difficult diagnostic problem. This is especially true in tuberculous meningitis, where early diagnosis is very important if antibiotic medication is to be effective. The key to suspecting tuberculous meningitis is the fact that the so-called prodromal period, lasting about two weeks, is very vague in its symptomatology, the patient usually being up and about. If looked for, there is usually mild but definite neck rigidity, which would at least lead the physician to perform a lumbar puncture. The findings upon spinal tap can lead one to suspect tuberculous meningitis. Then it is extremely important to pursue the tedious search until the bacillus is found in the spinal fluid.

ENCEPHALITIS

Surprisingly, the headache may be mild or even absent in some cases of encephalitis. Associated symptoms which provide the clue to this diagnosis are commonly, somnolence, eye signs, either in the pupils or in the extraocular movements, some neck rigidity, and finally, the results of lumbar puncture.

POLIOMYELITIS

Headache here is common but not necessarily present, and although a valuable clue, other considerations usually lead to the diagnosis, particularly back and neck rigidity, difficulty in straight leg raising, changes in reflexes, and, of course, lower motor neuron weakness or paralysis when it appears.

BRAIN ABSCESS

In brain abscess, there are two causes for special alertness. First, the extreme seriousness of delay in brain abscess; second, the difficulty often present because the headache related to the abscess may well follow a pain in the same region due to an antecedent sinusitis. Indications would be a change in the severity or location of the headache, unexplained alterations in the temperature, pulse, respiration and blood pressure, and the appearance of generalized symptoms, such as somnolence, dullness and constipation. Early neurological signs may be detected.

VASCULAR DISEASE

In cerebral vascular accidents, headache may not be a major problem or a major sign leading to the diagnosis. Typically, a stroke-like episode preceded by a sudden attack of severe headache and followed by deep coma, with a hemiplegia, is strongly suggestive of cerebral hemorrhage. Thrombosis and embolus may occur without appreciable headache.

In cerebral arteriosclerosis, the headache may be very persistent and annoying. The age group, the associated sclerotic changes, and possibly minor neurological findings would be the chief clues.

A very characteristic syndrome starting with sudden, extremely severe headache, followed by nausea, dizziness and fairly rapidly developing semi-stupor occurs in spontaneous subarachnoid hemorrhage. The finding of marked neck rigidity is the chief clue on examination, and a lumbar puncture gives grossly bloody fluid.

The chief consideration after the diagnosis is made is to attempt to determine any lateralizing signs, and to try to distinguish between the rupture of a congenital aneurysm, typically in younger or middle aged persons, rupture due to specific arterial disease, or thirdly, the possible presence of a sizable aneurysm that may be acting as an intracranial mass lesion, and that could be amenable to neurosurgical attack.

HEAD INJURY

1. With post-traumatic encephalopathy: Post-traumatic encephalopathy is a syndrome consisting of persistent headache after head trauma, with dizziness on change of posture of the head, emotional instability, personality changes, intolerance of alcohol, fatigue and difficulty in concentration, and inability to work.

The importance of this syndrome rests in the fact that head injury is becoming so frequent nowadays, therefore is apt to be a medical-legal consideration; the syndrome is of obscure nature; and, lastly, it is both important and difficult to attempt to distinguish this presumably organic residual of head injury from a post-traumatic neurosis with headache. In differential diagnosis, one must evaluate the degree of trauma, which would have to be appreciable to produce the organic residual. Any neurological signs or indications of damage would be indicative of organic change. In the organic post-traumatic state, the emotional instability after careful study, seems to have arisen only after the accident, whereas in the functional state, careful investigation may reveal either a background that is likely to lead to a neurotic state or possibly even the presence in lesser degree of similar symptomatology before the injury. This history may be difficult to obtain in a patient who is very sensitive about these factors, or in compensation cases. The personality change in the organic case carries with it a conviction of real change from previous personality, whereas in the functional case, there may be an aggravation of pre-existing tendencies. In typical instances, the irritability of the organic case causes a reaction of dislike to procedures of examination and various attentions. In the functional case, the patient is willing or anxious to get what attention he can. Sometimes, an indifference to a compensation claim may be present in the organic case, whereas, typically, there is a defensive aggressive attitude toward such a claim in the post-traumatic neurosis. The EEG may be of extreme value if carried out early enough after the trauma to detect organic changes, which can be followed, as they resolve, by repeated electroencephalograms.

The intolerance to alcohol consists usually of a spontaneous comment by the patient that a small drink or just one will have the the effect of two or three. On the other hand, in the post-traumatic neurosis, a small amount of alcohol may even serve to relieve some of the symptoms.

Psychological tests may be of value in picking up minor intellectual defects in the organic case, and in a similar fashion may pick up neurotic tendencies which are otherwise less apparent in the post-traumatic neurosis.

In these days of numerous head injuries due to automobile accidents, a chief feature in the prevention especially of post-traumatic neurosis is the manner of handling of the head injury case. There is a delicate clinical decision needed in advising a patient in regard to the length of convalescence and rehabilitation. It is now appreciated that early neurotic signs which may develop in any head injury case, because of the threat that is inherent in the patient's mind from the head injury, should be attended to as symptoms in their own right rather than to attempt to shame the patient out of them or "kid" him out of them, etc.

SUBDURAL HEMATOMA

Subdural hematoma may occur after relatively minor trauma, and is accompanied by progressively more severe headache, which, however, may not be very striking, and may be rather dull in character. The great significance of the symptom may be masked by the fact that the patient is up and about, and seems to show no other major neurological findings. The presence of neurological symptoms and findings, such as weakness of some part of the body or cranial nerve signs often constitute clues to the presence of subdural hematoma, but it is very essential to attempt to detect this complication of head trauma prior to the appearance of these evidences of brain damage. An electroencephalogram may again be of value, and the diagnosis may have to be confirmed by a trephine.

HEADACHES SECONDARY TO ASSOCIATED CERVICAL INJURY OF SOFT TISSUE OR BONE

Once in a while a post-head injury headache may turn out to be related to a relatively minor but significant injury to the neck which was masked at first either by unconsciousness or by the symptoms of the head injury. The chief clue to the detection of this complication which may cause unexplained headache is to bear it in mind and check for evidences of neck injury when the head injury patient becomes alert enough and free enough from the major symptoms of his head injury.

II. Headache due to functional alterations in the nervous system.

As we noted in the discussions of headache from the standpoint of various specialists, certain headaches that are not due to specific structural damage provide a meeting place for almost all specialists. They illustrate the need of dealing with the patient as a whole, and serve to remind us that this symptom, very specific to the patient, is a signal of a need to consider the patient's total metabolic state, and also his adjustment to a complex environment.

Such non-specific or "problem" headaches are the ones most frequently seen. Those associated with various tension-producing factors are receiving much more attention recently, especially since diagnostic methods for detection of local structural pathology have become so precise, since we have learned more of the mechanism of the production of headache, and since we have learned to appreciate the capacity of emotional and adjustment difficulties to cause physiological disturbances, even in persons without other evidences of nervous upset.

In a recent article on headache, Dr. Horton says, "nervous tension is one of the most important and least understood components of the headache syndrome." Other authors stress this factor, and every day experience confirms it. Newer knowledge of the vascular changes underlying many headaches makes it much more understandable that general nervous system-upset can cause headache. The frequent and marked response of the vascular system to autonomic nervous discharge due to emotion is common knowledge, and is easily demonstrated.

Though many types are mixed, functional headaches may be classified as:

1. Paroxysmal hemicrania—
   Migraine
   Histamine cephalgia
2. Occipital neuralgia
3. "Tension" headache

The classic migraine syndrome occurs in an active productive person usually having many interests, and certain needs to be adequate and successful, and whose health, other than the headache attacks, is very good. True migraine includes a characteristic and definite aura lasting 10 to 30 minutes, and consisting of either scintillating scotoma in one visual field, or numbness of the hand, corner of the mouth or tongue. As the aura fades, the headache appears in the region of the opposite temple. The pain is in the forward part of the head, is dull and is accompanied by a sick feeling, with or without nausea and vomiting. The patient may remain up and around but characteristically seeks a darkened, quiet room, wishes to lie down, and is able to sleep. The headache is likely to last 8 to 36 hours. Other physioolgical changes occur, such as diuresis, mild diarrhea, and peripheral vasomotor changes, but these are minor in relationship to the headache, and are usually not mentioned without direct questioning.

The tendency to the migraine syndrome is apparently a proneness rather than a disease. The reaction may be likened to a "condenser discharge" of tension, the sources of which are inobvious to the patient or others. Migraine is a typical example of a family of psychosomatic disorders, which are characterized by somatic physiological manifestations, in which any emotional or nervous expression of tension is blocked or forbidden, and the physiological outlet seems to be the only avenue remaining for such discharge.

Atypical migraine syndromes are common and probably represent variants of the same physiopathological mechanism.

Some attacks of migraine may be aborted by dihydroergotamine hypodermically, and a lesser number by oral administration, when the drug is given early in the attack. Many medications and procedures are advocated for the possible prevention of attacks. One writer reviewed the literature thoroughly, and pointed out that statistics of improved or cured cases after a large variety of treatment programs were all about the same. He felt their effect was non-specific. Nicotinic acid, the anti-histamine drugs and vitamin preparations have been recommended.

Histamine cephalgia is rare but of particular interest since it is so responsive to desensitization when a typical case is found. The typical histamine cephalgia appears in the early morning, often awakening the patient. It is unilateral like migraine, but extends to the occiput, is associated with other autonomic and vasomotor manifestations, chiefly lacrimation, nasal discharge and obstruction, and flushing about the cheek and eye on the affected side. This patient avoids lying down, is apt to sit up or walk about, and the attack usually lasts eight hours or less. More frequent are atypical attacks of this general type, which are much less responsive to specific therapy. The usual test for sensitivity is a combination of 0.05 mg. of histamine base intracutaneously, and 0.2 to 0.4 mg. subcutaneously. The intracutaneous test is hard to evaluate as a normal or usual reaction is a considerable flare and wheal. The subcutaneous test is more accurate if only 0.1 mg. is used. False positives are less frequent, and a patient with a true histamine headache will respond to this small dose with a typical attack. He may respond to the higher doses with a quite violent reaction which is undesirable. Antihistaminic drugs and, in selected cases, histamine desensitization are helpful and should be tried.

OCCIPITAL NEURALGIA

A very common headache is occipital, either unilateral or bilateral, in which a specific point of tenderness may be found directly over the greater occipital nerve as it emerges from the fascia, and in the muscular insertions at the base of the occipital bone midway between the mastoid and midline posteriorly. In a typical case even mild pressure here will not only be painful but cause pain over the occipital and parietal region of the head, and may reproduce a typical headache. A further hint of this syndrome is the complaint of various dysesthesiae over the area of distribution of the nerve: commonly a feeling of crawling or water trickling over the parietal area of the scalp. In a marked case, a dramatic therapeutic test may be accomplished by injecting the nerve with Novocaine which abruptly relieves the pain. (Suggestible patients may give a falsely positive reaction).

Occipital neuralgia is a common complication of the tension type of neurosis, with spasm of the posterior neck muscles, which very likely causes the neuritis by the chronic traumatic effect of the muscular taughtness. Fibrositis in this region may be an etiologic or complicating factor. The same pain and sensitivity may be associated with a high cervical disc herniation which irritates the second and third cervical roots more centrally. Sensory changes in the area of distribution of these two roots, reactions to neck movements, and x-ray findings are needed differential diagnostic points.

This irritation of the nerve associated with muscle spasm frequently respond to a simple but persistent regimen of massage, heat and neck exercises, accompanied by a mild sedative and a vitamin supplement of the B group. The key to the program is to start very gently in order to avoid further irritation, but to persist, gradually increasing the vigor of the massage and exercise, until a real workout can be tolerated.

Commonly, unless something is also done or happens concurrently to relieve the nerve-tension-state that underlies the muscular tension, the irritation will recur.

The "tension" headache group is less well defined. Actually, the headaches just discussed are varieties of tension headache. In this group are placed those less specific headaches of great annoyance, that are apt to have peculiar qualities, such as burning, drawing and pressure feelings, and that seem difficult for the patient to describe. The impression is gained that it may be not much of a headache but the concern and anxiety about it are more significant. Frequently, this is actually the case. The patient may use peculiar descriptive terms, such as "a locomotive going through my head," "a corkscrew," "a head in a vise." The exaggerated terminology is usually symbolic of the potency of the underlying tension, and an attempt on the part of the patient to express qualities of distress that come from sources other than the headache. This gives the impression that the patient is making too much of the headache. This is true, in the sense that it is really other things of which the patient is at the time unaware, that are "pressing."

The possible absence of other indicators of general nervous tension (insomnia, anorexia, fatigue, irritability, etc.) is misleading. Frequently, however, when these are searched for, they may be found to be hiding behind the headache. The headache will outweigh them and will be blamed for them. (The patient is apt to state, "who wouldn't be irritable with this headache," "naturally I can't sleep when it is bothering me and I don't feel much like eating," etc.). The patient may be quite firm about minimizing the nervous symptoms as he has no wish to "give in" to nervousness, feeling the attached social stigma. He is half aware that they are present. He "fights" them down, thus increasing tension and fatigue. He is touchy and ready to defend himself against the label of nervousness. The presence of such potent unwanted impulses creates a constant threat (lest they break past his guard), and this situation creates anxiety, often with attendant somatic reverberations. Consciously or unconsciously he also may doubt his own emotional stability and lose self-confidence. This aggravates his original tension problem, and may cause him to react with even more vigorous complaints, protesting against his somatic symptomatology instead of the underlying problem. He becomes the victim of a subtle and potent vicious cycle, which, if a particular combination of ingredients are present, can bring him to grief in spite of his willpower and determination.

The ideal treatment of tension reactions is like that of any other medical condition; namely, finding and eliminating the cause. In some cases this may not be necessary, thanks to the inherent power in people to resolve tensions if their nervous system is given half a chance.

In other cases, an actual analysis of the cause from the psychiatric point of view is impractical, requiring the availability of a fairly extensive series of psychotherapeutic interviews, and the attendance of someone especially trained in this technique. However, there are many things that can be done, and they are effective in a large number of patients, as is true in the case of other psychosomatic reactions commonly seen by the general practitioner. The medical investigation itself, a careful history, the confidence in the doctor, etc., are all important parts in the handling of such a case, and their psychotherapeutic value can be applied from the beginning of the doctor's contact and throughout the study. Some simple physiological explanations when they seem appropriate, and an honest interest and sympathy, are appreciated by the patient. He senses, usually vaguely or unconsciously, that reactions of his nervous system, including his feelings, are going to be considered part of his medical examination and will be received with understanding rather than criticism. The important situational and emotional factors need not be emphasized or made a great deal of. A neutral but respectful attitude will give the patient a chance to come to a healthy awareness at his own speed, and possibly without too much awareness of what is happening. The reassuring atmosphere may be the only needed contribution by the physician. The patient gradually has less need to "cover up" (instead of the opposite). He senses that the reactions of which he is ashamed or fearful are not getting the doctor excited (therefore, they must not be so unusual or reprehensible). From the doctor's tolerance he learns more self-tolerance; as the doctor accepts him as he is, with all of his reactions, so he will be better able to accept himself and others. In this manner, chiefly by an attitude which stems from his own awareness and acceptance of the role of tension-producing mechanisms, in producing physiological changes, the physician provides a healthy atmosphere, favoring the freedom of operation of the patient's own inherent healing and resolving mechanisms. This can happen without the physician spending an undue amount of time or going through any specific prescribed procedure of psychiatric nature or any calculated conversation other than that which comes up spontaneously and naturally in the carrying out of his medical investigation. It isn't so much getting the patient to give this extra history as it is the spontaneous provision of an environment in the office which doesn't inhibit this confidence. It isn't so much what one does as it is what we allow or encourage the patient to be able to do.

In addition to benefitting the patient by including this approach, mixed with the history-taking examination and follow-up visits, the physician can feel more certain of the functional diagnosis or can better evaluate possible functional factors in organic or mixed cases, or in occasionally deeply involved cases can better appraise the possible need for further specialized attention.

Dermatomyositis*

A Report of a Case with Autopsy and Literature Review

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The authors present, here, the account of an elderly woman whose clinical, laboratory and biopsy findings warranted the diagnosis of dermatomyositis. This disease is probably rarely encountered. The case herein described was followed and careful observations recorded, both in and out of the hospital, and eventually examined at autopsy. The final discussion touches upon practically all aspects of the disease.

EDITOR

An increasing number of cases of dermatomyositis have been studied and reported in the literature since the disease was first described but its etiology remains obscure and its treatment unsatisfactory.

The diagnosis is usually difficult to establish in its early stages and the disease still receives many and varied diagnoses.

We report this case because it presented the usual problems in diagnosis, and in addition, we were able to carry out complete postmortem studies.

CASE REPORT

A 67 year old white female was admitted to the Nebraska Methodist Hospital on August 28, 1949, complaining of a rash of four months duration which involved the entire face, the anterior thorax and both upper extremities. Shortly before the development of the rash, the patient had painted a closet and had used paint remover on her skin several times. The rash appeared as small red vesicles containing fluid which, after a few days, began to weep, leaving a red, flat, dry, scaling lesion. Shortly before admission the patient noted increasing difficulty in swallowing and flexing the neck while supine. This muscular weakness progressed until at the time of admission she was able to raise her head from the pillow only with the greatest effort and she complained of extreme weakness of both arms and legs. Simultaneously she had noted swelling of the right leg, especially the thigh which showed some pitting edema. For a few days prior to admission there had been some pain in the left anterior chest which was attributed to indigestion.

The past history revealed that on several occasions the patient had reacted to sunlight with the development of a rash similar to that of the present illness.

Physical examination revealed a well developed, well nourished white female who appeared the stated age and who appeared chronically ill. The skin showed a dry, scaling, erythematous rash present diffusely over the face, anterior thorax, posterior surfaces of the upper extremities and the anterior thighs. There was a shallow ulceration in the right axilla about 4.0 x 4.0 cm. in size. The eyes, ears, nose, and throat were normal. The funduscopic examination at this time showed no evidence of hemorrhage or exudate or other significant findings. The thorax was symmetrical. The breasts were atrophic. The heart and lungs were normal. The blood pressure was 180/50. The pelvic and rectal examinations were negative. The thighs showed a firm pitting edema and the right thigh measured 10.0 cm. greater in circumference than the left at comparable levels. The abdomen was flat, there were no palpable masses or organs.

Neurological examination revealed the cranial nerves to be normal except for weakness of the muscle groups served by N.XI and N.XII. There was marked motor weakness of various muscle groups, particularly the flexors of the neck, the muscles of the shoulder girdle and the quadriceps group of the thighs. In all these areas, pitting edema was present and the muscles were tender to palpation. The deep tendon reflexes were absent throughout. No pathologic reflexes were obtained.

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The admission hematologic examination revealed a Hgb. of 12.5 Gm., erythrocytes, 4,150,000, leukocytes, 10,950, with stabs 3, polymorphonuclear leukocytes 62, lymphocytes 17, monocytes 7, and eosinophils, 1 per cent. The hemoglobin and erythrocyte count gradually declined during the patient's period of hospitalization until on October 31, 1949, a hematologic examination revealed the following: hemoglobin, 10.5 Gm., erythrocytes, 3,660,000, leukocytes, 10,700, with polymorphonuclear leukocytes 71, lymphocytes 19, monocytes 10, and eosinophils 1 per cent. The white cell count showed little variation, ranging between 9,000 to 12,500 with an essentially normal differential count. The admission non-catheterized urine specimen presented a cloudy, amber appearance with an acid reaction, a specific gravity of 1.030, a trace of albumin, no sugar and a sediment showing 8 to 10 pus cells per high power field. Repeated urinalyses showed no essential deviation from these findings, except that on several occasions many uric acid crystals were observed. The trace of albumin persisted. An erythrocyte sedimentation rate on September 6, 1949, was 58 mm. by the Wintrobe method. A twenty-four hour urine creatine on September 7, 1949 was 241 mg. (normal 0 - 100) (1). This determination was repeated on October 14, 1949, with the same result. Cultures of the nose and throat for Corynebacterium diphtheriae were negative. Sternal marrow aspiration on September 1, 1949 showed a normal hematopoietic pattern and no "lupus erythematosis cells" were present.

Electrocardiogram: One tracing was normal.

Skin and Muscle Biopsy: A biopsy of the skin and muscle of the right anterior thigh was carried out on September 1, 1949. Grossly the specimen consisted of an elliptical shaped mass of skin measuring 5.0 cm. in length and 2.5 cm. in diameter. The underlying soft tissue was primarily adipose and measured 2.5 cm. in thickness. Two masses of muscle measured up to 3.0 cm. in diameter and were extremely pale and pinkish-gray in color, markedly edematous, fragmented easily and were slimy to touch. Microscopically the muscle showed changes compatible with the findings of dermatomyositis which are to be described in detail in the necropsy examination.

Hospital Course and Treatment: During the patient's hospital stay, she presented a daily temperature elevation to 100° (F). She was given paraminobenzoic acid in doses of 4.0 Gm. five times daily without any marked change in her condition. Following this she received aureomycin orally in doses of 500 mg. daily. This therapy was maintained for a period of two weeks without benefit except for a slight reduction in temperature. The drug was discontinued because of the development of severe and pernicious nausea. In addition, she received supplementary vitamin therapy and a high vitamin diet. A Prostigmine-atropine test for mysthenia gravis was done which was negative. She was dismissed on October 31, 1949, after 64 days of hospitalization with a diagnosis of dermatomyositis. Her condition at the time of dismissal was essentially the same as upon admission with some greater muscle weakness.

Course After Hospitalization: The patient was confined to her bed in her home from 10/31/49 to 12/30/49. She complained of alternating constipation and diarrhea. She was examined in her home on 12/23/49. The rash previously described was, in general, less evident than during her hospital stay. Flat, red, scaling lesions were present over the face and on the wrists. The axillary ulceration was well healed as was the scar at the site of the previous biopsy. There were brown areas of mottled pigmentation present, especially over the anterior neck, the shoulders, and under the breasts. Eyes: The pupils were round and equal and reacted to light and accommodation. Opthalmoscopic examination revealed the media to be clear and the nerve heads normal. Clusters of small white exudates which were fuzzy and not well demarcated were present in the retinae. These were located peripherally, the largest measuring about 5.0 mm. in diameter. Six or eight of these lesions could be visualized in the right eye and two or three in the left. Lungs: Coarse rhonchi and rales were heard in both lung fields. The patient was unable to cough vigorously and complained of fluid filling her throat and causing respiratory distress.

Neurological Examination: The cranial nerves were tested serially and were found to be normal except that the voice was hoarse and weak, becoming worse with prolonged conversation and she experienced marked difficulty in swallowing. Examination of sensory and coordination modalities of the peripheral nervous system was negative. A marked general depression of muscular capacity was evident, however. The patient was unable to lift her head from the pillow and could maintain a firm grip for only a few seconds. There was a complete areflexia of all deep tendon and cutaneous reflexes. No pathological reflexes could be obtained.

The patient's condition at that time was one of complete debilitation brought about by general muscle weakness and complicated by bowel complaints, dyspnea, dysphonia, and dysphagia.

On 12/30/49, the patient suddenly expired after complaining of a strangling pain over the anterior chest associated with a desire to cough. She had complained of constipation for the previous three days.

POSTMORTEM PROTOCOL

The body was that of a white female measuring 179 cm. in length and weighing an estimated 140 pounds. Arterial embalming had been previously carried out.

Skin: There was a faint generalized bronzing which was slightly accentuated over the anterior neck and thorax and over the lateral aspects of the upper two-thirds of the brachium. The skin of the face and lower one-half of the forearms and hands, especially the dorsal surfaces, showed a macular erythematous rash which was reddish-purple in color. There were early decubiti over both buttocks.

Exremities: Both shoulder areas were edematous. The right thigh measured 45.0 cm. in circumference, 15.0 cm. above the medial epicondyle of the femur. A corresponding measurement on the left was 94.0 cm.

Thoracic Viscera: Negative.

Abdominal Viscera: A primary carcinoma arising in the gallbladder was found. The gallbladder contained several mixed stones. Metastases were present in the liver and stomach, and peritoneal seeding was present on the diaphram and the mesentery of the small intestine. The bile ducts were not obstructed and the lesions were not large enough to alter the physiology of the organs.

Central Nervous System: The brain and spinal cord were normal.

Muscle Tissue: Many skeletal muscle groups were exposed and examined. All were pale pink to pinkish-gray in color in contrast to the normal reddish-brown. The muscle was soft, edematous and shredded easily.

Microscopic Examination: Cardiac muscle was normal. Smooth muscle from the large and small bowel and the urinary bladder revealed wide separation of the muscle bundles by the edema fluid. Muscle samples from the sternohyoid, sternocleidomastoid, quadriceps, psoas, and pectoralis major muscles were examined. Each of these specimens showed essentially the same findings. Low power magnification revealed variation of the size of the muscle bundles from normal to mere thread-like remnants. Many bundles were widely separated by edema.

The muscle bundles showed a variable type of change. Some of the fibers were swollen, evidently due to edema with separation of the myofibrils and in some instances rounded vacuoles were present filled with a granular precipitate. Some of the fibers were normal in size; others were small and showed hyalinization and loss of longitudinal and cross striations.

In both of these types the distribution of the pathologic change appeared segmental with portions of the fibers appearing essentially normal.

Longitudinal section of the muscle bundles showed a variable degree of nuclear proliferation of the sarcolemma. In some areas the nuclei were so numerous as a form a "streptococcal" like row. On cross section a given muscle bundle might show as many as 9 to 10 nuclei about its periphery instead of the usual 2 to 3.

Where atrophy was extreme, all that remained were groups of nuclei resting in small amounts of connective tissue.

Except for an occasional macrophage containing pigment, occasional lymphocytes surrounding some of the vessels, and a few polymorphonuclear leukocytes in a few fibers showing severe degeneration, the inflammatory cell infiltration was negligible.

Skin: The epidermis was rather thin and rete pegs were only occasionally seen. The malpighian layer was only 3 to 4 cells thick. The corium showed an inconstant change. In some areas it was greatly thickened as a result of edema with a wide separation of the collagen fibers. In these areas the capillaries were widely dilated and there was a moderate perivascular infiltration by lymphocytes.

Several sections of peripheral nerves showed no lesions.

The gallbladder lesion was adenocarcinoma.

The sections of the eye showed patchy areas of edema but no inflammatory cell infiltration.

DISCUSSION

Dermatomyositis (multiple myositis, pseudotrichinosis) is a rare disease involving skin and muscle. The incidence is equally divided between the sexes. The age range is wide. O'Leary(2) in his series of 40 cases reported a range from 4 years to 65 years. The disease is relatively more common in children where it is often associated with calcinosis universalis(3). The etiology is not known. Various bacteria have been cultured from involved muscles, particularly staphlococci, streptococci, and diphtheroids. A viral origin has also been postulated. Several authors have investigated endocrine malfunction as a factor. The adrenal cortex and the thyroid have been subjected to much study. As yet no definite etiologic relationships have been reported.

The onset of the disease is insidious, most commonly occuring in the summer and fall, and is frequently preceded by an infectious disease(2). The patient will usually first complain of either skin or muscle symptoms, or both. Less commonly, the symptoms at onset will be similar to those of Raynaud's disease(2, 4, 5). A slight fever about 100°F, lasting through the course of the disease is not uncommon. Hepatomegaly and splenomegaly are occasionally seen(2).

Dermatologic Aspects: The dermatologic findings, while variable, in general follow a rather definite pattern. This consists of telangiectasis and edema of the eyelids and rosy plaques and telangiectasis over the flush area reminiscent of the butterfly of lupus erythematosis. Similar lesions are present over the "V" of the neck. The skin manifestations may last from months to years. Eventually they fade, to be replaced by bronze pigmentation over the involved areas (6).

Muscular Aspects: The signs and symptoms referable to muscular involvement are independent of the skin manifestations. The patient will complain of weakness and swelling of various muscle groups. Most commonly these complaints will refer to the muscles of the shoulder girdles, arms, and neck. The groups involved are tender to palpation and exhibit a firm brawny pitting edema. The muscles of deglutition, phonation, and respiration are frequently involved at some time during the course of the disease. In O'Leary's(2) group, 27 of 40 complained of dysphagia, 13 of 40 of dysphonia, and 10 of 40 of dyspnea. In addition, 10 complained of Raynaud's phenomena. This syndrome was noted in 5 out of 9 cases in Jager and Grossman's(5) series. Impressed with this fact these authors performed a series of cutaneous heat experiments which revealed definite impairment of blood flow to the fingers. The same authors also reported that from 25 per cent to 40 per cent greater electrical stimulation was required to produce muscular response.

Ophthalmologic Aspects: Of particular interest are the findings in the retinae of patients with dermatomyositis. Bruce(7) reported three cases and Lisman(8) added one more. Both authors describe numerous areas of retinal exudate reminiscent of cotton wool patches. These occurred at the posterior pole and surrounded the disc and macula. They varied in size from small dots to areas the size of the disc. The color was grayish-yellow with a rather dull surface. They were not well circumscribed and tended to fade out into normal retina. For the most part, they overlay the vessels but occasionally were deep. They were roughly circular and tended to coalesce. Numerous hemorrhages were intermingled. The retinal picture was not static and new hemorrhages and exudates appeared as others regressed.

Laboratory: The laboratory findings are in general not remarkable. Most cases show a consistent mild anemia with a normal leukocyte count. Differential leukocyte counts will sometimes show a moderate monocytol sis. Elevation of the erythrocyte sedimentation rate is usually seen. Albuminuria is seen in about one half of the cases. Elevated 24 hour urine creatines are a constant finding(12).

In normal persons the venous blood sugar is lower than the arterial following the administration of glucose and insulin (Himsworth test). Griffiths(9) reported that in dermatomyositis the arterial and venous sugars were equal, thus inferring that the glucose was not converted to glycogen by the diseased muscular tissue. Jager and Crossman(5) repeated this experiment with their cases and reported no variation from normal.

Histopathology: The microscopic findings in the skin are not specific in dermatomyositis(3, 6, 10). The early lesion resembles that of lupus erythematosis. The corium is edematous as are the vessel walls. There are areas of inflammatory cell infiltration. The late lesion resembles that of scleroderma. The vessel walls are thickened and fibrotic. The corium is broadened and sclerosed.

There is disagreement regarding the specificity of histologic changes in muscle. Jager and Grossman(5) doubt that a specific diagnosis can be made. Effacement of the transverse striations and proliferation of nuclei are particularly striking findings. Edema between muscle bundles is marked. The muscle bundles exhibit fragmentation with granular and vacuolar degeneration, hyalinization and coagulation. The blood vessel walls are dilated but unchanged.

Histologic examination of the retina reveals occasional hyalin or lipoid change in the external plexiform layer, especially about the macula. A few scattered retinal hemorrhages may be seen. Otherwise the retinae are normal(7, 8).

Differential Diagnosis: The diagnosis of dermatomyositis is not difficult if adequate biopsies of skin and muscle are taken. The conditions most commonly confused with dermatomyositis are disseminated lupus erythematosis, diffuse scleroderma, Raynaud's disease, trichinosis and myasthenia gravis. Disseminated lupus erythematosis may be effectively ruled out by skin and muscle biopsy, and bone marrow biopsy. The histopathology of the skin in disseminated lupus erythematosis is diagnostic as is the demonstration of lupus erythematosis cells in the bone marrow(11). Diffuse scleroderma may also be ruled out by biopsy of skin and muscle. The usual case will show hide binding long before muscle change becomes obvious. Raynaud's disease is characterized by a long history of paresthesia and color change before cutaneous changes are manifested. Trichinosis may be presumptively ruled out if the skin test is negative. The course of the disease differs markedly from dermatomyositis. Demonstration of the Trichina spiralis is, of course, diagnostic. Myasthenia gravis may be effectively ruled out by muscle biopsy and by negative response to Prostigmine testing.

Prognosis: Dermatomyositis has at least 50 per cent mortality. Death most commonly is due to infectious disease such as erysipelas, pneumonia, septicemia, bacteremia, etc. With present day use of antibiotics and chemotherapeutic agents an improvement in mortality can be expected. At the best, however, dermatomyositis is a chronic disease having great morbidity, and is frequently fatal. Prognosis is somewhat better in children, many cases being recorded of recovery after prolonged illness and with minimal residua.

Treatment: Treatment is, at present, unsatisfactory. Antibiotics are indicated to decrease incidence of secondary infection, but are of no specific value. Vitamin E seems capable of reversing the creatinuria and is apparently of some value in treating the clinical disease(12). Paraminobenzoic acid had been used without success. Neostigmine is of no value. Physiotherapy to prevent contractures is of definite value, particularly in children. To the best of our knowledge, the case presented is the first to be treated with aureomycin. The results in this one case were not gratifying.

COMMENT AND SUMMARY

The clinical and laboratory pattern presented by this patient seems typical except for the absence of Raynaud's phenomena.

Diagnosis was confirmed by muscle biopsy. These changes would appear to us to be diagnostic. Autopsy studies proved this involvement to be widespread involving all skeletal muscles examined. Smooth muscle and cardiac muscle were not involved except for some interstitial edema. Definite involvement of myocardium has been reported(2), but smooth muscle changes have not been reported.

Although clinical eye findings in this case are similar to those described by Bruce(7) and Lisman(8), we were unable to demonstrate the miscroscopic changes they report.

Treatment, including aureomycin, was not successful in altering the course of the disease.

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L. A. Huey Company, Patterson Building, Omaha, Nebraska—Booth No. 3. This booth is designed to show various forms of investments presently available. It is our view that an investment program should be carefully developed. We are supplying at the booth an outline of how sound investment programs are constructed. Various literature will be available regarding municipal bonds, the natural gas industry and mutual funds.

Irwin, Neisler and Company, Decatur, Illinois—Booth No. 24. Research to service your practice—At the Irwin, Neisler and Company exhibit this year, you will find new and improved practice proven products for the management of cardiovascular disease, heart disease, bronchial asthma, obesity and other conditions which are continuing problems in the day to day practice of medicine.

Lanteen Medical Laboratories, Inc., 2020 Greenwood Street, Evanston, Illinois—Booth No. 18. Lanteen Medical Laboratories, Inc., extend a cordial invitation to visit their exhibit. The well known line of Lanteen Gynecics will be available for discussion.

Lederle Laboratories, 30 Rockefeller Plaza, New York, N.Y.—Booth No. 32. You are cordially invited to visit our exhibit booth where you will find representatives prepared to give you the latest information on Lederle products.

Eli Lilly and Company, Indianapolis, Indiana—Booth No. 28. You are cordially invited to visit the Lilly exhibit. New antibiotics, cardiac drugs, and antihistamines are featured in the display. Lilly salesmen will welcome your questions about these and other recent developments.

Mead Johnson and Company, Evansville, Indiana—Booth No. 33. Mead Johnson and Company will feature the change in the formulation of Dextri-Maltose, the dried carbohydrate, designed especially for use in infant formulas. In addition to Natalins, small capsules containing vitamins and minerals, designed particularly for use in pregnancy and lactation; the Vi-Sols and four Pablum cereals will be on display. Representatives in attendance will be glad to furnish information regarding the above products.

Monarch Life Insurance Company, 403 Farnam Building, Omaha, Nebraska—Booth No. 6. A cordial invitation is extended to all physicians attending the Annual Session to register at our booth and discuss their insurance programs with our trained representatives.

Ortho Pharmaceutical Corporation, Raritan, N.J. — Booth No. 9. Ortho cordially invites you to visit their exhibit. The Ortho display will feature Preceptin(R) vaginal gel, their new product for conception control designed for use without a vaginal diaphragm. Preceptin vaginal gel has achieved an outstanding record of clinical effectiveness and has been widely acclaimed by the medical profession. Your inquiries on Preceptin vaginal gel are invited.

Phillip Morris and Company, 100 Park Avenue, New York, N.Y.—Booth No. 21. Phillip Morris and Company will show the results of research on the irritant effects of cigarette smoke. An interesting demonstraion will be made on smokers at the exhibit which will show the difference in cigarettes.

Physicians and Hospitals Supply Company, 1400 Harmon Place, Minneapolis, Minnesota—Booth No. 25. You are cordially invited to visit our booth. Many new items of interest, including the new FCC-approved diathermy, will be on display. A large Stille instrument display will be featured also.

Picker X-Ray Corporation of Nebraska, 511 Sunderland Building, Omaha, Nebraska—Booth No. 5. We will display the latest Picker X-Ray equipment. Please come by our booth during the session and let us demonstrate it to you.

A. H. Robins Company, 1407 Cummings Drive, Richmond, Virginia—Booth No. 14. A. H. Robins Company medical service representatives, Dick Griegler and Larry Pruitte, in attendance at this exhibit, welcome the opportunity to discuss the merits of three new Robins products: Mephate capsules, an improved mephensin preparation; Donnatal plus tablets, providing the Donnatal spasmolytic-sedative formula with the addition of B complex; and Donnalate tablets, combining Donnatal and Robalate for peptic ulcer therapy.

Sandoz Pharmaceuticals, 68-72 Charlton Street, New York, N. Y.—Booth No. 4. Many of the fine products of Sandoz research will be on display at the annual session. We will welcome the opportunity to discuss them with all doctors in attendance.

W. B. Saunders Company, West Washington Square, Philadelphia, Pennsylvania—Booth No. 27. Mr. Dunn, the Saunders man for Nebraska, will be on hand on show all our books of interest to the practicing physician. Among the new ones, look for "Current Therapy 1953;" Beckman's "Clinical Pharmacology;" Dunphy & Botsford's "Physical Examination of the Surgical Patient;" Lewis' "Practical Dermatology;" Todd, Sanford & Wells' "Clinical Diagnosis;" and many others. All standards will also be available for inspection: Cecil-Loeb's "Textbook of Medicine;" Dorland's Dictionary; "The Medical and Surgical Clinics of North America," and many more.

(Continued on page xxvii)

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Vol. 38 May No. 5

THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

NEW CABINET POST

A new federal executive department with Cabinet status has been created through passage of Reorganization Plan No. 1. President Eisenhower signed a resolution April 1 which transforms the old Federal Security Agency into a Department of Health, Education and Welfare. Both houses of Congress overwhelmingly approved the measure.

As you will recall, a special session of the A.M.A. House of Delegates was held in Washington, D.C., on March 14, for the purpose of establishing medicine's position in regard to the creation of this Cabinet post. President Eisenhower, Senator Taft, Dr. Walter Judd, Dr. Louis Bauer, and others, appeared before the delegates, urging its adoption. The House subsequently unanimously approved establishment of the new department.

Most physicians will recall that the A.M.A. vigorously disapproved similar reorganization plans on two different occasions during the last administration. Some have asked why this plan was not also rejected. A comprehensive answer to this question is given by Doctor Bauer on the "President's Page" in the March 28 issue of the A.M.A. Journal.

Doctor Bauer wrote: "Both the previous attempts would have made health the 'tail of the dog.' There was no reason to believe that the plans would have done anything but provide increasing political control over medicine, and that, in fact, both attempts were primarily political plays. The well-known philosophy and the prior actions of the then Federal Security Administrator only confirmed us in such an opinion."

He tells of the many conferences A.M.A. officials held with President Eisenhower, other administration officers, and congressional leaders, leaving all with the feeling that at last medicine had a "friend at court." He added: "As a result of our conferences, it became apparent that we were alone in desiring an independent department of health." Opinion was that there are already too many independent agencies, and that some should be combined rather than split up.

"It was also stressed that a separate department of health, under an unfriendly administration, would well engage in empire building and prove to be the dragon that would devour us. While such could happen no matter what the arrangement, it would be less apt to happen if there were not a separate department. I must confess that this argument left me at a loss for an answer."

Doctor Bauer states that all suggestions of the medical profession at these conferences were largely adopted, including one that a special assistant to the secretary be appointed to be in charge of all health activities within the department. This person must be a recognized leader in the medical field, with wide "non-governmental experience."

To acquaint yourself with all facets of this action, please read Doctor Bauer's interesting statement.

IT'S NEWS

Every association, whether medical, business, fraternal or trade, attempts to perfect an effective system for the procurement and dissemination of news concerning its members. It is probably just as true that relatively few of these associations are successful in obtaining truly workable programs in this area of their activities. To a large measure, this is true of your state medical association.

Some of you may have noted that the "Human Interest Tales" column in The Nebraska State Medical Journal has for several months undergone "expansion." An attempt is being made to put as many names as possible into the column. The reason for this is that physicians have stated repeatedly that they regularly read this column each month.

The great majority of items for this feature are received through a clipping service. It is infrequent that a physician sends an item to the editor about himself or a colleague or his local medical society—in spite of multiple requests for them. Perhaps physicians are too modest to submit news about themselves. Perhaps a good many do not recognize that news concerning them is of interest to their colleagues in all parts of the state.

In a like manner, members of the profession often are lax in presenting newsworthy stories to their newspapers, particularly news about the local medical group. Because of this reluctance, many worthwhile stories—stories that could be of public relations value to the entire profession—are never printed. You may be sure that your news editor would be glad to have all the medical news you can give him. He wants it because he knows the public is interested in it.

Your local newspaper is still the finest PR facility to you. Please use it frequently. And by the same token, the journal is anxious to use personal items about members of the association. Remember, if it's about you, it's news!

News and Views

From the Washington Report on the Medical Sciences:

The largest non-Federal medical and hospital care program in the country today is that of the United Mine Workers . . . Administered under UMWA's Welfare and Retirement Fund, it spent approximately $50,000,000 for medical and hospital benefits during the year which ended last June 30. An additional $9,300,000 went for total disability cash payments, part of which went to paraplegics and other disabled miners undergoing medical rehabilitation.

From The Lincoln Journal:

The initial gamma globulin allotment to Nebraska for protection against poliomyelitis will be enough to innoculate approximately 1,832 "intimate contacts" of clinically diagnosed cases, Dr. E. A. Rogers, Acting Director of the State Department of Health, has announced.

Doctor Rogers said the first allotment will arrive about May 1, according to a telegram from the Office of Defense Mobilization. The allotment will be based on a calculation of 40 cc of gamma globulin times the median number of reported cases for the five-year period, 1947 to 1951.

According to health department figures, the median for Nebraska over this period was 458 cases. On the basis of a 10 cc dosage, Doctor Rogers explained, the allotment would provide for innoculation of approximately 1,832 persons. Doctor Rogers added that ODM would provide additional allotments, on a set formula, if experience shows that more gamma globulin is needed in the state.

Doctor Rogers explained that "intimate contacts" are those in the immediate household of the polio patient who have been in daily contact with him. He said that the gamma globulin is not to be used for treatment or for mass innoculations. Doctor Rogers will meet with the Polio Coordinating Committee of the Nebraska State Medical Association to determine how the serum is to be distributed. He said, however, that the gamma globulin will be furnished to physicians without charge.

From The New Hampshire Medical Society Bulletin:

The widely read Boston Herald writer, Bill Cunningham, speaking recently at a Blue Shield meeting in Woodstock, Vt., where the physicians from the Twin States were in attendance, declared ". . . with the Republicans in Washington and the pressure for socialized medicine temporarily off, doctors — if they're as smart as I know they are — will work together this year and next to improve existing medical coverage plans and broken voluntary insurance provisions."

Mr. Cunningham praised the medical advancements brought about by American physicians working together for the common good of humanity. "But," he said, "just because the Republicans are in and the Democrats—sponsors of socialized medicine—are out, gives doctors no cause to slack up on their efforts to better medical coverage and improve voluntary health plans!"

From The Nebraska City News-Press:

President Eisenhower spoke out (March 14) against compulsory or socialized medicine with a pledge that his administration will not try to be the "big poobah" of the medical profession.

In a brief, extemporaneous talk, Mr. Eisenhower told the House of Delegates of the American Medical Association (meeting in special session in Washington) that he doesn't like the words "compulsory" or "socialized." To him, he said, the words "seem to be a step" toward the thing the nation is spending billions to prevent. He said the system of free enterprise must be safe-guarded.

Mr. Eisenhower expressed faith that the medical profession can take care of the health needs of the nation better through cooperation and friendship of the administration than by government direction.

FIRST WOMAN MEDICAL OFFICER IN ARMY

The Department of the Army announced that on March 11, 1953, the first woman physician who was ever accepted in the U.S. Regular Army was sworn in. She is now 1st Lt. Fae M. Adams, MC, of San Jose, California. The oath of office was administered by Major Louis H. Foubare, in the presence of the Army Surgeon General and representatives of the Army's women service corps.

From "News Notes," Vol. 2, No. 4:

EUROPEAN MD CONTRIBUTES TO AMEF

A European-educated physician now residing in Madera, California, believes that physicians should support American medical schools. Although he owes no allegiance to any school in this country, Dr. Thomas Klein sent in a donation to the American Medical Education Foundation. His action sets an example for graduates of American medical colleges. In less than three months of this year, the Foundation has received in excess of $657,000 from more than 7,000 contributors towards its 1953 goal of two million dollars.

From "News Notes," Vol. 2, No. 4:

FORMER MEDICAL OFFICERS SURVEYED

In analyzing 467 questionnaires returned by former armed forces medical officers, the Council on National Emergency Medical Service has extracted pertinent data on percentage of time spent in treatment of military personnel and their dependents, staffing conditions and the number of physicians willing to remain in service.

The survey of former army, navy and air force physicians shows:

(1) Percentage of Time: Between 44% and 54% of total overseas time was spent in treatment of military personnel and between 39% and 53% of total domestic time. Treatment of dependents took between 19% and 28% of overseas time and between 25% and 44% of domestic time.

(2) Staffing Conditions: Overstaffing—136 replies—ranged from 15% to 44%. Understaffing—79% replies—ranged from 15% to 28. Adequate—227 replies—ranged from 42% to 58%.

(3) Willing to Stay in Service: 214 replied yes; 236 no.

The Council will continue to send out questionnaires to physicians as they return to civilian life.

From Insurance Economics Surveys:

The federal government is engaged in eleven major insurance operations, which to a degree, are competing with private companies. These insurance activities mean the governmental underwriting of risks to which private property and private business are exposed.

Liability which the federal government has assumed to pay in death benefits under the social security law is greater than the entire amount of private insurance in force. The government's liability to pay pensions under social security is estimated at 10 to 15 times greater than all of the annuity business on the books of the private insurance companies. Taxes collected by social security, however, are little more than one-third of the premium income of private insurance companies.

Listed below are the insurance underwriting activities of the federal government:

1. Life insurance for men in the armed services and veterans.
2. Marine and aviation war risk insurance.
3. Old age and survivors insurance.
4. Railroad employes' retirement system.
5. Civil service employes' retirement system.
6. Unemployment compensation.
7. Crop insurance.
9. Insurance of commodities under Commodity Credit Corporation loans.
10. Guarantees of bank and other depositories.
11. Guarantees of mortgage loans.

Dr. A. J. Rourke, President of the American Hospital Association, hails the growth of Blue Cross and Blue Shield but says one of its troublesome complications is a resultant dearth of clinical material in teaching hospitals.

Doctor Rourke expressed this opinion at a panel discussion held before the President's Commission on the Health Needs of the Nation.

The American Medical Association Council on Medical Education and Hospitals discussed this problem at the clinical session in Denver last December. It was suggested that the paying public must be educated to the idea that with the disappearance of the charity ward, they must allow themselves to be used as teaching material in the training of future doctors.

From The Alliance Times-Herald:

> Drs. J. F. Kennedy and R. J. Morgan, Alliance, were recently the victims of a $1,500 robbery, consisting of checks, cash and narcotics. A total of $1,154 in checks and $400 in cash was taken, along with some codine and morphine.
>
> The robbery occured during the night of April 1, with the money being taken from a safe. Police theorized that the "job was pulled by experts," since the safe was unmarked, nor was there evidence on the doors or windows to indicate that an entrance had been forced.
>
> The offices of three dentists were also entered. Their losses amounted to more than $300 in cash, gold and stamps.

The first Mental Health Institute, sponsored by the University of Nebraska through its Student Health Center, was held March 20 and 21 at the Lincoln campus, with the cooperation of the Nebraska Psychiatric Institute, University Extension Division and the University of Nebraska Research Council.

Purpose of this first institute was to initiate the university's expanded mental health program and to present information to faculty members relative to the understanding and recognition of emotional problems among college students. The burden of the program was directed toward faculty members in an effort to more clearly define their relationship to student mental health problems, particularly in their counseling responsibilities.

Faculty representatives from several of the state's colleges attended the institute. A student convocation was held in conjunction with the institute on March 20. Guest speaker for this occasion was Dr. Dana Farnsworth, medical director for the Massachusetts Institute of Technology. Doctor Farnsworth spoke on: "Mental Health of College Students—What Is It?"

Other guest speakers were Drs. L. C. Strough, Cecil Wittson and R. H. Dickinson, all of Omaha. Dr. S. I. Fuenning, director of the Student Health Center, stated that the university is undertaking a comprehensive mental health program which will be under the direction of Dr. I. W. Brill. Doctor Brill, formerly of New York, recently joined the Student Health Center staff.

Doctor Fuenning said the university's expanded mental health program has been made possible by a grant from the Woods Charitable Funds, of Lincoln.

Information received from the Department of the Army, Office of the Surgeon General contains the following interesting information:

"One hundred and fifty June graduates of the Nation's medical schools have been approved for the Army's Medical Intern Program and will spend their first year out of school in one of the Army's eleven large teaching hospitals, the Army Surgeon General has announced.

"Having met the educational, physical and other requirements set up by the Army, the young doctors will be commissioned upon their graduation and will be called into active duty as First Lieutenants in the Medical Corps, United States Army Reserve July 1st."

The same bulletin lists the following men from Nebraska who will enter this program on July 1st, 1953:

Leonard E. Alkire, 1106 N. Lincoln, Lexington (Uni. of Nebr.).

Donald E. Heins, Wauneta (Uni. of Nebr.).

Robert H. Kurth, 2736 Franklin, Lincoln (Uni. of Nebr.).

INTERNSHIP MATCHING PROGRAM

On July 1 more than 6,000 new doctors from U.S. medical schools will begin internships at hospitals throughout the country. As a result of a national matching plan, now in its second year of operation, ninety-five per cent of the interns will complete their formal medical training at the hospital of their first or second choice, according to a report on the recently completed program in the April issue of The Journal of Medical Education. Eighty-five per cent of the students received their first choice internship.

The national matching plan was set up last year to lessen difficulties caused primarily by the disparity between the number of interships and doctors available to fill them. The difference between the number of internships and available new doctors continued this year at about the same rate. While 6,033 students participated in the plan, some 10,971 internships were offered.

The matching plan has gained increasing support from students and hospitals since its inception last year. It was proposed in 1950, but the first participants were 1952 graduates. The plan has been found impartial and orderly, helping to relieve pressures on both students and hospitals.

Announcements

A postgraduate symposium on the Basic Sciences Related to Anesthesiology will be presented by the University of Pittsburgh School of Medicine, Department of Surgery, Section on Anesthesiology, June 8-12, 1952. Registration Fee, $25.00; participants limited to fifty. Contact University of Pittsburgh School of Medicine, Pittsburgh 13, Pa.

A post-graduate course in Anesthesiology for the General Practitioner will be given by the University of Colorado School of Medicine, 4200 East Ninth Avenue, Denver, Colorado, May 1 and 2, 1953. Registration fee, $5.00 and tuition fee, $15.00. Contact, Director of Graduate and Postgraduate Medical Education, Uni. of Colo., School of Medicine at above address.

GAMMA GLOBULIN

It was announced by the National Foundation for Infantile Paralysis that the Foundation and all other interested parties have placed all available Gamma Globulin under control of the Office of Defense Mobilization. This office will allocate the existing supply through State and Territorial Health Officers, primarily for the prophylaxis of measles and treatment of hepatitis, regardless of the resulting limitation in its use in the prevention of poliomyelitis. When available through the Health Officers, there will be no charge for Gamma Globulin.

The Department of Otolaryngology, University of Illinois College of Medicine, announces its Annual Assembly in Otolaryngology, divided into sections:

(a) Basic Section, Septemper 21 through 26, 1953, devoted to surgical anatomy and cadavaer dissection of the head and neck, and histopathology of the ear, nose, and throat; under the direction of Dr. M. F. Snitman.

(b) Clinical Section, September 28 through October 3, 1953, consisting of lectures and panel discussions, with group participation in otolaryngological problems and current trends in medical and surgical management.

Registration, limited. May register for one or both sections. Write, Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk St., Chicago 12, Ill.

ANAPHYLACTIC REACTIONS TO NEO-PENIL

The Council on Pharmacy and Chemistry, the A.M.A,. has stated that Smith, Kline and French have voluntarily submitted information that there have been fourteen severe anaphylactoid reactions to the intravenous administration of penethamate hydriodide (Neo-Penil) and that three resulted in death. The Council makes the following suggestion:

"Physicians should ascertain from their patients before administering any form of penicillin whether any allergic manifestations followed previous use of a preparation of this drug. If there is any doubt, a scratch or intradermal test should be performed, utilizing the penicillin preparation to be administered as the allergen."

This does not constitute a guarantee that, in case of a negative skin reaction, a reaction will not occur, but is a good precaution.

A Postgraduate Course in Hematologic Diagnosis will be given at Michael Reese Hospital by Dr. Karl Singer, Director, Department of Hematologic Research, Medical Research Institute, July 20 to August 1, 1953; full time. It will include actual slide reading, normal and pathologic, peripheral blood and marrow; immuno-hematologic reactions and disturbances of clotting mechanism. Slide collection provided; may be retained. Write, Department of Hematologic Research, Medical Research Institute, Michael Reese Hospital, Chicago, Illinois.

The Annual Meeting of the American Therapeutic Society will be held in the Hotel Biltmore, in New York City, May 28-31, 1953. An outstanding feature is a symposium on tobacco, composed of seven papers by well known doctors. This group of papers covers all the pertinent data concerning the effect of tobacco on various organs and system of the human body.

There will also be symposia on recent advances in medicine and surgery. An entire day will be devoted to new items in therapeutics. Guests are welcome. Oscar B. Huntler, Jr., M.D., Secretary, 915 19th St., N.W., Washington, D.C.

A.M.A. INAUGURAL CEREMONY WILL BE BROADCAST BY ABC

The American Broadcasting Company radio network will carry the inauguration of Dr. Edward J. McCormick of Toledo, Ohio, as President of the American Medical Association on Wednesday night, June 3, it has been announced by A.M.A. headquarters in Chicago.

The inaugural ceremony at the 102nd Annual Session of the A.M.A. in New York City will be heard over more than 300 ABC stations in this country, Alaska and Hawaii. Except for some local variations because of station program schedules, the inauguration will be carried at 10-10:30 p.m. in the Eastern Time Zone and 9-9:30 p.m. in all other time zones.

The actual inaugural ceremony will take place Tuesday night, June 2, in the Hotel Commodore, but it is expected that practically all radio and television time that night will be disrupted by special news and film programs on the coronation of Queen Elizabeth. It therefore will be necessary to transcribe the program for a delayed broadcast on Wednesday night.

THE PREMATURE UNIT AT THE UNIVERSITY HOSPITAL

The Board of Regents recently endorsed a plan to open the new Premature Nursery at the University of Nebraska Hospital to premature infants regardless of financial eligibility, provided the family physician makes recommendations for admission. It is expected that, where the family can make some payments to the hospital, this will be done. However, the recompense is of secondary consideration, the primary objective of the nursery being to supply such care to premature infants as will result in a maximum percenttage of successful survivals. Should the family physician wish to assign the premature patient to a member of the pediatric staff at the University Hospital, on private status, he may do so.

The premature unit has two main objectives:

1. To afford good nursing care to the premature infant.
2. To provide teaching material for resident, intern, and undergraduate training in this field, in the hope that the morbidity and mortality of the premature may be reduced.

THE FORMULARY OF THE NEBRASKA STATE MEDICAL ASSOCIATION

During the month of May the Formulary of the Nebraska State Medical Association will be in the hands of each member of the Association. Also, the Nebraska Pharmaceutical Association has purchased copies for each of its members.

Originally, the Formulary was established for use by governmental agencies, particularly for the State Department of Assistance. The horizon of use will be much greater than this limited field, however. It is visualized that eventually this formulary will be in use in many hospitals throughout the State and will also become an important implement of private practice.

To the best of our knowledge this is the first formulary established by a state medical association although they have been in common usage by many hospitals for a considerable length of time.

Please bear in mind that this is your Formulary and that it will be only as useful as you make it. Your committee will be open to suggestions concerning revisions, either additions or deletions. In the course of a year there are usually 300 to 400 new preparations entering the drug field but fewer than 50 are new drugs. The remainder are new combinations or refinements of old drugs. These will all be studied by the revision committee during the year and will be considered experimental until final decision is made as to whether or not they are to be added to the Formulary. The revision committee, headed by Dean Burt of the University of Nebraska School of Pharmacy, will be active during the ensuing years.

It is important that you become familiar with the Formulary, especially the instructions concerning the way to use it. It has been simplified as much as possible; and, it is felt that any disease can be adequately treated by the use of the drugs listed in the Formulary.

The Formulary will be exhibited in a special booth at the Annual Session of the State Medical Association in May. It is hoped that every member attending the session will take time to visit this booth and discuss the Formulary and its use.

RICHARD E. GARLINGHOUSE, M.D.

Coming Medical Events

ANNUAL SESSION, NEBRASKA STATE MEDICAL ASSOCIATION, May 11-14, 1953, Paxton Hotel, Omaha. M. C. Smith, Executive Secretary, 1315 Sharp Building, Lincoln 8.

ANNUAL SESSION, AMERICAN MEDICAL ASSOCIATION, June 1-5, 1953, New York City, N.Y. George F. Lull, M.D., Secretary, 535 North Dearborn, Chicago 10.

WEST CENTRAL DIABETES ASSOCIATION, May 11, 1953, Paxton Hotel, Omaha. F. L. Rogers, M.D., 805 Sharp Building, Lincoln 8.

NEBRASKA ACADEMY OF OPHTHALMOLOGY & OTOLARYNGOLOGY, May 11, 1953, Paxton Hotel, Omaha. Paul Peterson, M.D., 702 Sharp Building, Lincoln.

BUSINESS MEETING, NEBRASKA CHAPTER, AMERICAN COLLEGE OF SURGEONS, May 10, 1953, 6:30 p.m., Paxton Hotel, Omaha. R. E. Garlinghouse, M.D., 723 Sharp Building, Lincoln.

ANNUAL MEETING, AMERICAN GOITER ASSOCIATION, Drake Hotel, Chicago, Illinois, May 7-9, 1953. George C. Shivers, M.D., 18½ N. Tejon Street, Colorado Springs, Colo.

DR. F. G. THOMPSON, SR., LECTURESHIP, May 28, 1953, St. Joseph Missouri. Mr. Guy A. Slaybaugh, Thompson, Brunner & Knepper Clinic, St. Joseph.

ANNUAL MEETING, NEBRASKA TRUDEAU SOCIETY, Omaha, June 18, 1953. William Nutzman, M.D., Kearney.

ROCKY MOUNTAIN CANCER CONFERENCE, July 8 and 9, 1953, Denver, Colorado. Mr. Harvey Sethman, 835 Republic Building, Denver 2.

IN-RESIDENCE POSTGRADUATE STUDY, Univeristy of Nebraska College of Medicine, Omaha. Daily instruction until June 20, 1953. Alumni Secretary or Public Relations Office at the College of Medicine, 42nd and Dewey Streets, Omaha.

ANNUAL ASSEMBLY, OMAHA MID-WEST CLINICAL SOCIETY, October 26-30, 1953, Paxton Hotel, Omaha. Miss Irene Rau, 1036 Medical Arts Building, Omaha.

CRIPPLED CHILDREN'S CLINICS—
May 9, Ogallala, Elks Club
May 23, Ainsworth, High School
June 6, Lexington, High School
June 20, Scottsbluff, St. Mary's Hospital
July 11, Norfolk, State Hospital
July 25, McCook, St. Catherine Hospital
August 8, North Platte, Knights of Columbus Bldg.
August 15, Chadron, Elks Club.
August 29, Hastings, Mary Lanning Hospital.

NEBRASKA STATE RADIOLOGICAL SOCIETY—October 21, Veterans Hospital, Lincoln.

ANNUAL SESSION, NEBRASKA ACADEMY OF GENERAL PRACTICE, May 12, 1953, Paxton Hotel, Omaha. W. E. Hungerford, M.D., 1904 Spencer, Omaha.

PROGRAM
EIGHTY-FIFTH ANNUAL SESSION NEBRASKA STATE MEDICAL ASSOCIATION

May 11, 12, ,3, 14, 1953

Hotel Paxton, Omaha, Nebraska

MONDAY, MAY 11, 1953

GOLF TOURNAMENT

1:00 p.m.____________________Omaha Country Club

TRAP SHOOT

1:00 p.m.____________________Omaha Country Club (Gun Shack)

Cocktails 6:00 p.m. Dinner 7:00 p.m.

SPORTSMAN DINNER________Omaha Country Club

Reservations should be made with committee chairman, Leroy W. Lee, M.D., 1436 Medical Arts Building, Omaha, Nebraska; Telephone WE-6066, by 10:00 a.m., Monday, May 11, 1953.

House of Delegates____________________2:00 p.m.

ACADEMY OF GENERAL PRACTICE DAY
TUESDAY, MORNING, May 12, 1953

9:00 Meeting to be opened by Harold S. Morgan, M.D., Lincoln, President, Nebraska State Medical Association

Kenneth Rose, M.D., Lincoln, Presiding

9:05 Movie, "Diagnosis of Poliomyelitis"

9:30 "Lower Nephron Nephrosis as Seen in the Korean Casualties and Its Management"
—Francis Pruitt, M.D., F.A.C.P., Col. Medical Corps; Chief, Medical Service, Letterman Army Hospital, San Francisco (Formerly Consultant, Internal Medicine, Far East Command)

10:00 "The Roentgenological Manifestations of Cardiovascular Injury"
—Elmer A. Lodmell, M.D., A.C.R., F.A.C.P., Col. Medical Corps; Chief, Radiological Service, Letterman Army Hospital, San Francisco, California

10:30 "The Significance of Multiple Injuries in Relation to the Surgery of Trauma"
—Carleton Mathewson, Jr., M.D., F.A.C.S., Professor Surgery, Stanford University School of Medicine, San Francisco, California

11:00 "Uses and Abuses of Antibiotics in the Surgery of Trauma"
—Lowell A. Rantz, M.D., Associate Professor of Medicine, Stanford University School of Medicine, San Francisco, California

12:30 Academy of General Practice Luncheon
Ulrich R. Bryner, M.D., President American Academy of General Practice, Salt Lake City, Utah

TUESDAY AFTERNOON

D. B. Steenburg, M.D., Aurora, Presiding

2:00 Presidential Address
—Harold S. Morgan, M.D., Lincoln

2:20 Installation of Incoming President
—James F. Kelly, M.D., Omaha

2:30 Guest Introduction
—C. C. Lillibridge, D.D.S., President, Nebraska State Dental Association

2:40 Necrology
—George B. Salter, M.D., Norfolk

H. D. Runty, M.D., DeWitt, Presiding

2:50 "Experiences with Cold Injury in the Korean War"
—Francis Pruitt, M.D.

3:10 "The Roentgenological Manifestations of Injury to the Genito-Urinary Tract"
—Elmer A. Lodmell, M.D.

3:30 "The Recognition and Management of Minor Soft Tissue Injuries"
—Carleton Mathewson, Jr., M.D.

3:50 "The Role of Infection in Trauma"
—Lowell A. Rantz, M.D.

4:20 Informal Symposiums

Paul Read, M.D., Omaha, Presiding

Room A—
"Vasopressor Drugs in the Management of Shock and the Selection of Antibiotics in the Surgery of Trauma; Special Reference to the Role of the Laboratory"
—Lowell A. Rantz, M.D.
—Col. Francis Pruitt, U.S.A. (MC)

Max Gentry, M.D., Gering, Presiding

Room B—
"Penetrating and Non-Penetrating Injuries to the Abdomen"
—Carleton Mathewson, Jr., M.D.
—Col. Elmer A. Lodmell, U.S.A. (MC)

TUESDAY EVENING

FUN NITE, Omaha Athletic Club, Douglas County Medical Society, Sponsors

Cocktails—6:30 p.m. Dinner—7:30 p.m.
Dance—9-12 p.m.

House of Delegates____________________8:00 a.m.
Board of Councilors____________________5:00 p.m.

WEDNESDAY MORNING, May 13, 1953

G. E. Peters, M.D., Randolph, Presiding

8:50 Movie, "Physiology of the Kidney"

9:30 "An Otological Clinic" — Kodachrome slides and a file of ear drum pictures, histology of biopsies, audiograms and therapy
—H. G. Kobrak, M.D., Ph.D., Otologist, University of Chicago, The School of Medicine, Chicago, Illinois

10:00 "The Medical Management of Urolithiasis"
—Rubin Flocks, M.D., Professor of Urology, State University of Iowa College of Medicine, Iowa City, Iowa

10:30 "Clinical Syndromes Resulting from the Over- and Under-Function of the Adrenal Glands"
—Edward H. Rynearson, M.D., Head of Section on Medicine and Endocrinology, Mayo Clinic; Professor of Medicine, Graduate School University of Minnesota, Rochester, Minnesota

11:00 "Some Problems of Psychiatry"
—George S. Johnson, M.D., Professor of Psychiatry, Stanford University School of Medicine, San Francisco, California

WEDNESDAY AFTERNOON

12:30 Luncheon, Ballroom

James F. Kelly, M.D., Omaha, Presiding

1:15 "Problems of the Modern Medical Teaching Center"
—Mark R. Everett, M.D., Dean, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma

2:00 "New Concepts in the Treatment of Deafness"
—H. G. Kobrak, M.D., Ph.D.

2:20 "Treatment of Carcinoma of the Prostate"
—Rubin Flocks, M.D.

2:40 "True Hyperinsulism as Contrasted to Functional Hypoglycemia"
—Edward H. Rynearson, M.D.

3:00 "Treatment in Psychiatry"
—George S. Johnson, M.D.

3:30 Informal Symposiums

L. J. Gridley, M.D., Scottsbluff, Presiding

Room A—
"Diseases of Oral Cavity" (Kodachrome Slides)
—H. G. Kobrak, M.D.

N. Chick, M.D., North Platte, Presiding

Room B—
"Clinical Aspects of the Anterior Pituitary"
—Edward H. Rynearson, M.D.

G. L. Sandritter, M.D., Ingleside, Presiding

Room C—
Informal Discussion of Psychiatric Problems
—George S. Johnson, M.D.

7:00 Banquet, Nebraska State Medical Association, Hotel Paxton
Awarding of 50-Year Pins
"Two and Two Aren't Always Four"
—Mr. Tom Collins, Kansas City, Missouri

House of Delegates____________________8:00 a.m.
Board of Councilors____________________9:00 a.m.
Board of Trustees____________________5:00 p.m.

THURSDAY MORNING, MAY 14, 1953

John Campbell, M.D., Grand Island, Presiding

9:00 Movie, "Self-Examination of Breast"

9:30 Nebraska Cancer Research and Education Association

9:50 "Obstetric Aspects of Prematurity—Prevention and Management"
—Isadore Dyer, M.D., Professor of Obstetrics, The Tulane University of Louisiana School of Medicine, New Orleans, Louisiana

10:20 "The New Outlook in Coarctation of the Aorta"
—H. R. Kahle, M.D., Associate Professor Surgery, The Tulane University of Louisiana School of Medicine, New Orleans Louisiana

10:50 "Ectopic Pregnancy"
—Conrad G. Collins, M.D., Professor and Head of Department of Obstetrics and Gynecology, The Tulane University of Louisiana School of Medicine, New Orleans, Louisiana

THURSDAY AFTERNOON

12:30 Luncheon, Nebraska State Medical Association and Woman's Auxiliary

Harold S. Morgan, M.D., Lincoln, Presiding

"You and the American Medical Education Foundation"
—Gunnar Gundersen, M.D., Member of Board of Directors, American Medical Education Foundation; Member, Board of Trustees, American Medical Association, LaCrosse, Wisconsin

H. H. Morrow, M.D., Fremont, Presiding

2:00 "Diagnosis and Management of Bleeding in the Third Trimester of Pregnancy"
—Isadore Dyer, M.D.

2:20 "Intussusception: Diagnostic and Therapeutic Considerations"
—H. R. Kahle, M.D.

2:40 "Cancer of the Vulva"
—Conrad G. Collins, M.D.
3:30—ROUND TABLE

G. E. Peters, M.D., Randolph, Presiding
Room A—
Manikin Demonstration
—Isadore Dyer, M.D.

D. P. McCleery, M.D., Beatrice, Presiding
Room B—
GYN Clinic
—Conrad G. Collins, M.D.

B. R. Farner, M.D., Norfolk, Presiding
Room C—
"Emergencies of Newborn"
—H. R. Kahle, M.D.

House of Delegates......8:00 a.m.
Board of Councilors......9:00 a.m.

The Woman's Auxiliary

WELCOME — ALL DOCTOR'S WIVES TO THE NEBRASKA STATE MEDICAL AUXILIARY CONVENTION

Once again Omaha is proud to play host to the Nebraska State Medical Association Convention; and, the Woman's Auxiliary to the Omaha-Douglas County Medical Society is happy to be hostess to the wives of the doctors attending the meetings.

Informality and information are the aims of the Auxiliary sessions. From the "Get Acquainted" Brunch on Tuesday morning at the Fontenelle Hotel to the Joint Luncheon on Thursday at the Paxton Hotel, an air of comradeship will prevail.

In such an atmosphere, a pleasant renewal of acquaintances, and a mutual exchange of ideas about auxiliary activities from every part of the state will follow. To insure the participation of all, business meetings have been streamlined, lengthy reports abstracted, and speeches are limited so that time for them will prove only an interesting interlude.

FUN? It will be found aplenty at the Omaha Athletic Club on Tuesday evening when everyone gathers for refreshments at 6:30 followed by a dinner-dance.

FASHION? The very latest will be previewed at the Omaha Country Club on Wednesday noon at the luncheon and fashion show honoring guest speaker, Mrs. Leo J. Schaeffer, President-Elect of the Woman's Auxiliary to the American Medical Association.

Plan to come to Omaha on May 11, and stay through the 14th. Participate in the activities and see for yourself that auxiliary accomplishments are exciting and satisfying.

Mail your reservation card now.

MRS. JAMES J. O'NEIL,
Convention Chairman.

PROGRAM OF THE STATE CONVENTION OF THE WOMAN'S AUXILIARY TO THE NEBRASKA STATE MEDICAL SOCIETY

Monday, May 11th

Registration at the Paxton Hotel

Tuesday, May 12th

Registration at the Fontenelle Hotel
9:00 a.m. Pre-Convention Board Meeting at the Fontenelle Hotel
11:00 a.m. Get Acquainted Brunch—Buffet, Assembly Room
1:00 p.m. Annual Meeting of County Presidents Round Table Discussion, with Election and Installation of New Officers

Wednesday, May 13th

Free Morning
12:30 p.m. Luncheon and Fashion Show at the Omaha Country Club
Guest—Mrs. Leo J. Schaeffer of Salina, Kansas, President-Elect of Women's Auxiliary to the American Medical Association

Thursday, May 14th

9:00 a.m. Post-Convention Executive Board Meeting

Everyone is invited to this new and informal type program. Reservations should be made early.

OMAHA CONVENTION COMMITTEE CHAIRMEN

Social—Mrs. Thomas Timothy Smith.
Program—Mrs. G. Kenneth Muehlig, Mrs. Arnold Lempka.
Registration—Mrs. Henry Kammandel.
Reservations—Mrs. John W. Gatewood.
Transportation—Mrs. Frank Mnuk.
Hospitality—Mrs. Arnold McDermott.
Flowers—Mrs. W. Howard Morrison.
Publicity—Mrs. Stephen L. Magiera.

The Dawson County Medical Auxiliary met at the home of Mrs. Charles Sheets of Cozad on March 20th. Mrs. Charles Hranac was assistant hostess.

Mrs. V. D. Norall gave an excellent program about Nebraska, using colored slides and accompanying poems.

Election of officers was held with Mrs. A. W. Anderson of Lexington becoming the new president; Mrs. C. E. Hranac of Cozad, vice president; Mrs. S. H. Perry of Gothenburg, secretary-treasurer.

On April 15th, the Scottsbluff County Medical Auxiliary entertained at a tea and style show at the Scottsbluff Country Club. The affair was a benefit for the Scottsbluff hospitals.

Mrs. James D. Hayhurst of Scottsbluff was chairman of the committee in charge of arrangements and was assisted by Mrs. Stewart Wiley of Scottsbluff and Mrs. W. O. Brown of Gering.

The Buffalo County Medical Auxiliary is sponsoring a drive to recruit women for a career as practical nurses.

A tea for interested women was held at the Good Samaritan Hospital in Kearney, on Tuesday, March 24th.

Auxiliary members assisting Mrs. B. R. Bancroft of Kearney are Mrs. F. E. Dickerson, Ravenna; Mrs. C. O. Ehlers, Ravenna; Mrs. J. W. Laughlin, Elm Creek; Mrs. Stanley Harris, Gibbon; Mrs. C. E. Peck, Minden, and Mrs. E. C. Wiltse, Shelton.

PROGRAM OF THIRTIETH ANNUAL MEETING OF WOMAN'S AUXILIARY TO THE A.M.A.

The Thirtieth Annual Meeting of the Woman's Auxiliary to the American Medical Association will be held at the Hotel Statler in New York City from June 1-5, 1953.

A cordial invitation is extended to all members of the Woman's Auxiliary, their guests, and the guests of physicians attending the convention, to participate in all social functions and attend the general meetings of the Auxiliary.

Registration begins on Sunday, May 31st.

The program is as follows:

Monday, June 1—Round Table Discussion; Tea, honoring Mrs. Ralph B. Eusden, President, and Mrs. Leo J. Schaefer, President-Elect.

Tuesday, June 2—Formal opening of the Thirtieth Annual Meeting of the Women's Auxiliary; Luncheon in honor of the Past Presidents of the Women's Auxiliary to the American Medical Association; Opening meeting of the American Medical Association, and, Reception and Ball in honor of the President of the American Medical Asociation.

Wednesday, June 3—General Session of the Woman's Auxiliary; Annual Luncheon, honoring Mrs. Ralph B. Eusden and Mrs. Leo J. Schaefer.

The Nebraska State report will be given at the general session on Wednesday, June 3.

Know Your Blue Shield Plan

Blue Cross-Blue Shield will again be represented among the exhibits at the Annual Session of the Nebraska State Medical Association, May 11-14, Hotel Paxton, Omaha. A cordial invitation to visit the booth is extended to all physicians.

Orville W. Farrand, Omaha, has been named Hospital and Physician Relations Representative for Nebraska Blue Cross-Blue Shield Plans. He will make periodic service calls at the 118 Blue Cross hospitals in the state, and he will call on the President and Liaison Committee of each of the county medical societies.

One of the major problems facing Blue Cross and Blue Shield Plans, nationally as well as in Nebraska is the marked slowing up of enrollment. During the last eighteen months, there has been a noticeable drop in the rate of growth in membership. While the enrollment of new members continues, cancellations nearly offset the gains, with the result that total membership has shown only a small increase. Doctors can help this situation by continuing to encourage their patients to enroll, and to retain membership.

Nearly 60 physicians, representing their county medical societies, attended the fourth annual Conference of Blue Shield Liaison Committees in Grand Island, April 23. Chairman for the meeting was Dr. Harry A. Jakeman, Fremont, member of the Prepayment Medical Care Committee of Nebraska State Medical Association. Speakers were Dr. W. M. McGrath, Grand Island, Dr. Glen E. Peters, Randolph, M. C. Smith, Lincoln, Arthur L. Coad, E. K. McDermott, Joseph O. Burger, Floyd M. Edwards and Orville W. Farrand, all of Omaha. Question and answer periods on matters of Blue Shield policy and operation were features of the afternoon and evening sessions.

Reminder: PRORATION OF PAYMENTS — When two or more doctors render medical or surgical care concurrently and wish to have the Blue Shield scheduled payment porated, they should:

1. Agree upon the amount to be prorated to each physician or surgeon, making sure that the total amount does not exceed the scheduled Blue Shield allowance.

2. Submit separate reports. Each doctor should indicate the exact character of the services rendered —whether pre-operative diagnosis, assistance at the operation, or post-operative care.

3. Secure the patient's signature on each assignment form, and indicate on the assignment form the exact amount to be prorated. These reports should, whenever possible, be sent to the Blue Shield office together.

Some 70 million pounds of sugar are used each year in tobacco products, chiefly in cigaret manufacture.

Deaths

Frank P. Murphy, M.D. Doctor Murphy died suddenly, Monday, March 23, of a heart attack. He was sixty-two years old. The doctor graduated from Creighton University School of Medicine in 1915 and later served his school as associate professor of obstetrics. He had served in the Army Medical Corps during World War II. Besides his practice and teaching he had written extensively on medical subjects. Doctor Murphy is survived by his wife, Agnes; a son, Francis X., Las Cruces, N.M.; five daughters, the Misses Patricia and Monica, Omaha; Mrs. Mary Alice Cummings, China Lake, Calif., and Mrs. Elizabeth Anderson, Red Oak, Iowa. There are also, two brothers and four sisters.

David S. Rosenberg, M.D. Doctor Rosenberg died in Franklin where he had practiced medicine for nearly seventeen years, on March 15th. He was forty-two years old. The doctor was born in New York City, received his medical education at Creighton University, and served in the Air Force for nearly four years during World War II. He is survived by his wife, Ethel; a son, David; his father, Nathan; a brother, Joseph; one sister, Mrs. Esther Fisher, and many more distant relatives.

Albert Gerish, M.D. Doctor Gerish died in an Omaha hospital, on March 30. He was seventy-seven years old at the time of his death and he had practiced his profession in Omaha for thirty-five years. He is survived by his wife, Nettie, who is a physician and by two brothers, Walter of Michigan, and William of California.

Manuel Grodinsky, M.D. Doctor Grodinsky died on March 31st, after a long illness. He was fifty-six years old at the time of his death. Doctor Grodinsky, a native of Omaha and a graduate of the University of Nebraska College of Medicine, had been in practice in his home city for thirty years. He was also an associate professor of Anatomy and Surgery at his alma mater. He is survived by a daughter, Miss Baylamae; three sisters, the Misses Helen, Fanny, and Rose, all of Omaha; three brothers, A. E., of Minneapolis, Minn.; David, Chicago, Ill., and William, an Omaha attorney.

Human Interest Tales

Comunications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. Howard Baker, Chappell, was inducted into the armed forces in April.

Dr. and Mrs. R. T. Jones, McCook, vacationed and visited friends in Florida in March.

Dr. and Mrs. Warren Thompson, Omaha, have returned from a vacation to Louisiana and Mississippi.

Dr. R. G. Rich, who has practiced at David City for 52 years, has retired from practice. Doctor Rich is 88 years old.

Dr. U. S. Harrison, Neligh, has been elected president of the medical staff of the Antelope Memorial Hospital in Neligh.

Dr. N. Chick, North Platte, is a candidate for the local board of education.

Dr. and Mrs. R. F. Seivers, Blair, recently returned from a trip to Mexico. While there, Doctor Seivers attended the international conference of the Academy of General Practice.

Dr. J. H. Judd, Omaha, was a guest lecturer at the American Academy of General Practice meeting in St. Louis, March 23-26.

Dr. Paul Bancroft, Lincoln, spoke to the Madison Six County Medical Society in Norfolk, April 2, on "The Epidemiology of Poliomyelitis."

Dr. Fritz Teal, Lincoln, was recently elected president of the Association of Bone and Joint Surgeons at its annual meeting in New Orleans.

Dr. and Mrs. C. J. Miller, Ord, recently returned from a vacation trip to Mississippi, Louisiana, Alabama, Georgia, Florida and Tennessee.

Dr. Mason E. Lathrop has announced his withdrawal from the Wahoo Clinic group. He plans to take an extended vacation starting in June.

Dr. Peyton T. Pratt, Omaha, presented a paper, "Blood Dyscrasia," before members of the Tri-County Medical Society in Fremont, April 5.

Dr. M. E. Markley, North Loup, who was earlier reported to be leaving shortly for military service, has been given an extension until at least July 1.

Dr. Joseph L. Kovarik, graduate of the University of Nebraska College of Medicine, will be married in June to Miss Delores Casey of Milwaukee. Doctor Casey is now taking a residency in surgery in Peoria, Illinois.

The Journal extends its deepest sympathy to Dr. G. B. Ira of Lynch, on the death of his wife March 18. Doctor Ira, who has practiced in Lynch for more than 50 years, has been hospitalized for several weeks with a broken leg.

Dr. George L. Clark, Omaha, has been chosen Medical Director of the Red Cross Regional Blood Center in Omaha. He succeeds Dr. Robert M. Joyner, who has entered the military service. Dr. Charles Frandsen, Omaha, will assist Doctor Clark.

Dr. James K. Shafer, 1938 graduate of the University of Nebraska College of Medicine, has been named chief of the Division of Venereal Disease of the U.S. Public Health Service. The appointment was announced by Dr. Leonard A. Scheele, Surgeon General.

The most sincere sympathy of the Journal is extended to Dr. F. P. Dorsey, Sr., and Dr. F. P. Dorsey, Jr., of Hartington on the death of Mrs. F. P. Dorsey, the wife and mother, respectively, of the two Hartington physicians. Mrs. Dorsey passed away on March 19.

The offices of Dr. R. R. Anderson, Nehawka, and Dr. L. S. Pucelik, Plattsmouth, were broken into on the evening of April 2. Nothing was taken, although it was believed the prowlers were in search of narcotics. (See News and Views story on theft of Alliance doctors 'offices).

Dr. L. E. Dickinson, Sr., Ravenna, was recently honored at a local banquet which was attended by over 350 people. Doctor Dickinson was appointed by former Governor Val Peterson to represent Nebraska at the Western Hemisphere Conference of the World Medical Association at Richmond, Viginia, in April.

Dr. Lowell Dunn, Omaha, is the new president of the Nebraska Heart Association. Dr. F. G. Gillick, Dean of the Creighton University School of Medicine, is President-elect. Other officers are Dr. Wayne Waddell, Beatrice, and Dr. W. Max Gentry, Gering, vice presidents; Dr. S. L. Magiera, Omaha, secretary, and Dr. David Davis, Omaha, treasurer.

(Continued on page xxvii)

50 and six

YEARS TREATING ALCOHOL
AND DRUG ADDICTION

In 1897 Doctor B. B. Ralph developed methods of treating alcohol and narcotic addiction that, by the standards of the time, were conspicuous for success.

Twenty-five years ago experience had bettered the methods. Today with the advantages of collateral medicine, treatment is markedly further improved.

The Ralph Sanitarium provides personalized care in a quiet, homelike atmosphere. Dietetics, hydrotherapy and massage speed physical and emotional re-education. Co-operation with referring physicians. Write or phone.

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Ralph Emerson Duncan, M.D., Director

HUMAN INTEREST TALES

(Continued from page 200)

Some 30 Nebraska physicians attended the Annual Session of the American Academy of General Practice in St. Louis, March 23-26. Included in the Nebraska group were Drs. John Brown, Lincoln, president of the Nebraska Chapter; Glenn Whitcomb, Omaha, delegate, and William J. Gentry, Gering, delegate. One of the highlights of the meeting was the Nebraska Breakfast held Wednesday morning, March 25, at the Jefferson Hotel. Thirty-three physicians and their wives attended.

Dr. Orvis A. Neely, Lincoln, and Dr. John H. Brush, Omaha, represented the Prepayment Medical Care Committee of the Nebraska State Medical Association at the National Conference of Blue Cross-Blue Shield Plans in Hollywood, Fla., April 12-16. Members of the Blue Shield board and executive staff who attended were: Dr. A. J. Offerman, Dr. E. W. Bantin, Dr. G. P. McArdle, Mr. Arthur L. Coad, Mr. E. K. McDermott, Mr. Joseph O. Burger, all of Omaha; Drs. W. W. Carveth and George W. Covey, Lincoln; Dr. Donald B. Steenburg, Aurora, and Dr. Glen E. Peters, Randolph.

TECHNICAL EXHIBITS

(Continued from page 189)

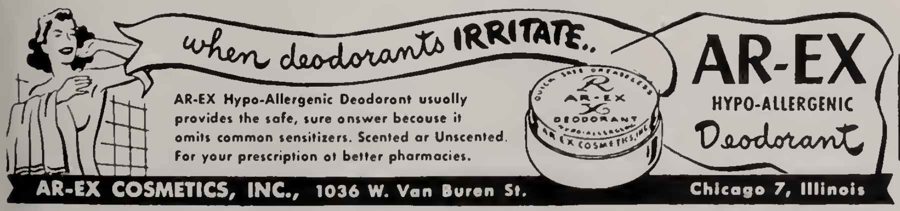
G. D. Searle and Company, Chicago, Illinois—Booth No. 16. You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured will be Vallestril, the new synthetic estrogen for menopausal symptoms; Pro-Banthine, the true anti-cholinergic drug for the treatment of motion sickness.

Seiler Surgical Company, 111 South 17th Street, Omaha, Nebraska—Booth No. 11. Best wishes for this year's meeting. Our display will comprise the best in the latest equipment. Be sure to see the new enema technique by Clyserol Laboratories.

E. R. Squibb and Sons, 745 Fifth Avenue, New York, N.Y.—Booth No. 30. New Squibb products, and new brochures of useful interest to you on products already introduced, will be featured at our booth. As in former years, your Squibb representative again cordially invites you to visit the Squibb booth.

Ulmer Pharmacal Company, 1400 Harmon Place, Minneapolis, Minnesota—Booth No. 26. The Ulmer Pharmacal Company invites you to view our exhibit and allow our representatives to show you the new Ulmer products which are available at this time. We would especially like to call your attention to our P-B-Sal-C family for the treatment of arthritic conditions, Ulvical for prenatal use. Neo-Pyrapar for premenstrual tension, and many new injectables.

Winthrop-Stearns, Inc., 1450 Broadway, New York, N.Y.—Booth No. 8. Winthrop-Stearns invite you to visit their booth where the following products will be featured: Apolamine, for more efficient control of nausea and vomiting due to pregnancy, radiation sickness, and other causes; Mebaroin, efficient, well tolerated antiepileptic combination of Mebaral and diphenylhydantoin.



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Meat...

and the Low Sodium Diet

The beneficial effect of sodium restriction in the management of hypertension and many types of cardiac disease is firmly established. A low sodium diet aids in preventing edema and frequently leads to a significant reduction in arterial tension.

To emphasize the importance of sodium restriction and to enable the physician to present his patient with an informative discussion of the subject, The American Heart Association has just published a valuable pamphlet entitled "Food For Your Heart."* Covered also in this booklet is the importance of weight reduction in the management of the cardiac patient.

Dietary recommendations for three levels of sodium restriction are given. In all of them, meat is an important constituent of the diet. In the diet providing moderate sodium restriction (0.5 to 1.5 Gm. of sodium), 4 to 6 ounces of unsalted meat, fish or fowl are allowed. In severe restriction (0.5 Gm. sodium), 3 to 4 ounces of meat are permitted daily. The weight reduction-moderate sodium restriction diet calls for 5 to 6 ounces of meat daily.

This booklet again emphasizes the valuable application of meat in the dietary management of cardiac disease, hypertension, and obesity. Since, as the manual emphasizes, infectious diseases and such scourges as typhoid fever have now been controlled with antibiotics, chemotherapeutic agents and modern sanitation, "many physicians and scientists consider nutrition the most important environmental factor in health."

Meat, with its wealth of high quality protein, B complex vitamins and important minerals, plays an important role in the aim toward better national health. That the generous consumption of meat by the American people is a significant factor in attaining this goal is reflected in the statement that "most physicians feel that the high American consumption of protein is a good thing."

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*Food for Your Heart, a Manual for Patient and Physician, Department of Nutrition, Harvard School of Public Health, Harvard University, The American Heart Association, Inc., New York, 1952. Copies available through local Heart Association.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

American Meat Institute
Main Office, Chicago...Members Throughout the United States

The Nebraska State Medical Journal

ESTABLISHED 1916 BY THE NEBRASKA STATE MEDICAL ASSOCIATION

Vol. 38 Norfolk, Nebraska, June, 1953 No. 6

EDITORIAL

DON'T ASK FOR JUST PLAIN ASPIRIN

The Formulary of the Nebraska State Medical Association has been completed. Copies have been sent to all doctors and pharmacists in the state. Each doctor has had an opportunity to visit the booth at the annual session and to receive instruction on how to use this booklet. Plans for revisions have been made and, in fact, are in operation. Revision will be a continuous process the results of which will be sent out at regular intervals. As in any new venture of this kind, the most important immediate need will be to supply information on items that inadvertently were omitted.

What good can come from the use of this formulary? The briefest answer would be that this depends entirely upon the doctor. It has considerable potential value to every patient, every doctor, and every pharmacist in our state. Of these, the patient is of first importance, but the benefits to be derived from this State Association activity are by no means confined to those that accrue to the patient.

Unless the reader differs from most other doctors he has constantly struggled to remember an ever increasing number of trade names attached to important drugs. Many of these drugs are official U. S. Pharmacopoeia, National Formulary, or New and Nonofficial Remedies preparations. Oftentimes the confusion caused by names applied by the manufacturers, completely obscures the fact that the wanted drugs can be had under official titles.

Along with the multiplicity of names, many of them trademarked, there comes an increase in price. This increased cost must be carried right down the trade line to be paid, eventually, by the patient. No doubt there are occasions when the trademarked product needs to be used because of special circumstances; but, very often, the same therapeutic result can be obtained by the use of a standard drug, listed under an official name, either in the U.S.P., the N.N.F., or in N.N.R. This may usually be purchased at a significantly lower price.

Let us examine just a few examples of what we have been discussing: Corticotropin costs the pharmacist $21.50* less for ten vials, when purchased under this standard U.S.P. name, than under its trade name; secobarbital, sodium (N.N.R.), costs the druggist $39.42 less for five thousand capsules than the same drug, when purchased under its trade name; acetylsalicylic acid compound is sold to the pharmacist for $7.75 less per five thousand tablets, than is the same combination of drugs when purchased under one of its trade names. Examples such as these could be multiplied almost endlessly.

If the physician makes reference to his Formulary a habit, and thus selects the standard drug, under its official title, he will save the druggist the necessity of carrying a tremendous inventory of expensive duplications. The pharmacist can, if he will, pass on some of this saving to the purchaser. Furthermore, and of greater importance, the official drug usually will cost the patient less money. In this way the doctor can have a direct part in reducing the cost of medical care, and he can accomplish this without jeopardizing either his results or the physical welfare of his patient.

Every time you hear the radio blare forth the warning "Don't ask for just plain aspirin" be reminded of your Formulary and impelled to use it constantly.

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*The prices quoted were as of the date this was written.

SPECIALTY BOARDS

About the time that specialty boards began to multiply, the writer saw a sign in the window of a doctor's office in a small town near Rochester, Minnesota. This sign read as follows: "Doctor ....; Specialist in All Diseases." For many years after specialty boards became the regimenting factor in the lives of many young doctors, a practitioner having an adjacent office still declared, according to the sign on his office door, that he was a specialist in rectal diseases. Many people passed in and out of this door, presumably seeking his services as a specialist. In truth, he was a cultist who kept his father's medical diploma hanging on the wall of his office, in order to deceive anyone who might be curious about his background. We have all known general practitioners who retired to the practice dealing with diseases of the eye, ear, nose, and throat. Such things as the above are not prevented by the present vogue. Specialty boards can not assure the public that every doctor who calls himself a specialist is, indeed, deserving of this title. They can, however, definitely improve the ability of most of those who claim this distinction.

One who ponders this subject, however, can not help wondering how far the specialty boards are entitled to carry their demands. At present, any serious minded doctor, or medical student, who plans to specialize, feels constrained to prepare for, and to successfully pass the examinations given by the board in his chosen field. The required preparation, including the medical school, the internship, the residency, and the preceptorship, takes about ten years. If every intelligent, well adapted, serious minded student who finishes this ten-year-trial were assured that, in the end, he would be certified, this would seem quite justifiable. If, on the other hand, a fairly large per cent of those who reach the examination are flunked, as often happens, it appears that something may be wrong with the system. Can you put yourself in the position of the doctor who has worked hard for ten years, at great expense and sacrifice, who, upon examination, can not quite get into the upper fifty per cent and consequently fails? There is an old familiar saying that a fool can ask a question that a wise man can not answer.

If one looks back, in the matter of time, he wonders how some of the great men in medicine became specialists. Benjamin Collins Brodie, for example, began to study medicine under a preceptor, in 1801, when he was eighteen years old. (Preceptors are now frowned upon). His teacher was Sir Everard Home, Surgeon to St. George's Hospital in London. At age twenty-two Brodie became assistant to Doctor Home; at twenty-five, assistant surgeon to St. George's; at twenty-seven, a Fellow of the Royal Society; at thirty-nine, full surgeon to St. George's; and, at forty-five Brodie became surgeon to King George IV. These were not mere political appointments, but were well deserved. You may recall that he described Brodie's Abscess, Brodie's Pile, Brodie's Disease, and, a tumor of the breast that also bore his name. These descriptions appeared in the literature among other of his brilliant writings, presented in English that required no illustrations to make the reader see what the writer described.

Then, one thinks of Withering, Mackenzie, Jenner—but why go so far back. Harold Gifford, John Summers, J. P. Lord, H. W. Orr, Harry Everett, A. D. Dunn, LeRoy Crummer, and scores of other top-flight specialists, many of whom we knew, all made it before the specialty boards had been conceived, to say nothing of born.

This is not written to decry specialty boards, because they undoubtedly have very important functions. It is, rather, to ask whether these official bodies, organized to improve the quality of specialized practice of medicine, are going beyond what is reasonable. Are they assuming an unnecessarily arbitrary attitude in setting standards and promulgating requirements for specialization? Have they a moral right to exclude as many well prepared doctors from their chosen fields as they are doing at the present time? Will the end justify the means?

Time and experience may prove that there is considerable lack of realism, perspective and practicality in the present ssytem of certification of specialists.

". . . The improvement of scientific pathology seldom leads to the invention of new remedies; but it enables us to understand better the application of those, which are already in use; to know the particular cases to which particular remedies are suited, and to distinguish the curable diseases, from those, in which a cure cannot be effected." Brodie: Medico-Chir. Trans., London, 5:239-254, 1814.

Barbiturates in Anesthesia*

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The author relates the reasons for popularity of Pentabarbital for induction of anesthesia and even as the only anesthetic agent. She then calls attention to the shortcomings, the dangers, the complications, and the contraindications that must be considered in its use. She believes the choice of an anesthetic agent demands the following considerations in the order given: the safety of the patient; the surgeon's need for adequate anesthesia; and, lastly, the desire of the patient for comfort.

EDITOR

Barbiturates are commonly used in anesthesia today. The drug most frequently employed is Pentothal sodium. To a spectator, a Pentothal induction is a highly dramatic incident. It almost seems to be a work of magic. It is simple; it is rapid; it is effective. As an anesthesiologist, I question whether or not it is a wise procedure to employ this technique so freely. I believe that this is a problem deserving our serious consideration.

I am fully aware of the overwhelming acceptance of this anesthetic on the part of the public. The patients demand it. Those who have experienced the effects of this drug, and those who have merely heard about it are equally insistent that they must have Pentothal. Surgeons can easily insure their popularity with patients by requesting this method of induction. However, over-enthusiasm about this drug has led to its indiscriminate use. Every drug is potentially dangerous, and this one is no exception. Patients should not be encouraged to expect to receive Pentothal exclusively.

I believe that Pentothal is a valuable drug. Its advantages are many. They may be be enumerated as follows:

Patients lose consciousness without the sensation of doing so and without the unpleasantness associated with the covering of nose and mouth with a mask. Psychic shock is thereby avoided.

Excitement or struggling is rarely seen.

The apparatus required is minimal.

There is no fire hazard.

There is depression of the metabolism.

There is no stimulation for the production of secretions in the respiratory tract.

Recovery is prompt if minimal doses are employed.

Post-anesthetic emesis is infrequent if the patient has been fasting.

It can be used successfully to supplement various types of regional anesthesia.

All of these advantages are important; I do not mean to minimize them. Pentothal has earned a secure place for itself. These advantages do not mean, however, that it is without blame, that it can do no harm, or that it is an essential ingredient of each and every anesthetic administered.

Let us review some other facts about Pentothal. It lacks several important features of an acceptable anesthetic. Its analgesic properties are minimal. The muscular relaxation that it provides is not satisfactory, particularly in vigorous subjects. These deficiencies are only partially balanced by its fine hypnotic qualities. I cannot consider Pentothal to be a true anesthetic agent on the basis of hypnosis alone. Analgesia and muscular relaxation can be attained, of course, but only by exceeding the recommended safe dosage. In view of the fact that its margin of safety is not great, excessive dosing is a foolhardy procedure.

Another fact to be kept in mind is that Pentothal is noncontrollable. Once it has been injected into a vein, it cannot be retrieved; one must wait until it is detoxified. Certain pathological conditions may retard the rate of detoxification and produce abnormally deep or prolonged anesthesia. There is no true antidote for Pentothal, to help us in such a situation.

There are no reliable signs of anesthesia under Pentothal. This means that the anesthetist must attempt to maintain the patient between the zones of decreased reflex activity on one hand, and respiratory and circulatory failure on the other. When increased muscle tone and slight signs of movement appear, the surgeon is likely to become annoyed, but obviously we must err on the side of safety in judging our dosage. We must also remember that there is a great difference in the susceptibility of individuals to the barbiturates. The response of a given patient to a given dose may differ greatly from time to time. Toxic overdosage can easily occur. The fractional method of injection overcomes some of this danger, but cannot be relied upon to eliminate the peril entirely.

Respiratory embarrassment may follow the use of Pentothal. There may be primary respiratory depression from overdosage. There may be laryngeal spasm. The reflexes are not all abolished under Pentothal; in fact, the pharyngeal and laryngeal reflexes may be hyperactive. A combination of respiratory depression and laryngeal irritation may prolong the induction time of a subsequently administered inhalation anesthetic. It is common to use Pentothal prior to ether or cyclopropane. Using Pentothal does not shorten the time required to develop an anesthetic blood level of these agents. This fact is frequently overlooked or ignored.

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*Read before Omaha Mid-West Clinical Society, October, 1952.

Another effect of Pentothal on the respiratory system is often overlooked. Under Pentothal anesthesia the sensitivity of the respiratory center to carbon dioxide is progressively decreased. In children, the respiratory center is very easily depressed. This fact, combined with the relatively small bronchi that these patients have, means that there is less effective ventilation than in the case of adults. Moreover, children are usually frightened by having a venipuncture done. If barbiturates are to be given to children, I believe it is best to administer them rectally.

Circulatory complications are also seen under Pentothal. In normal patients hypotension frequently occurs. When enough drug has been given so that there is no response to painful stimuli, the systolic pressure will drop to about 80 or 90 mm. Hg. In the presence of hypertension there is an abnormal fall in the blood pressure. This amounts to two or three times as much as when the initial pressure is normal. In general, the rapidity of the decrease parallels the rapidity of the injection. Patients who have a preoperative decreased venous return or decreased cardiac output do not remove Pentothal from the circulating blood to the non-nervous tissues as rapidly as do normal patients. Reduced blood flow through the liver results in slow detoxification.

There may be some minor complications in connection with the venipuncture. Some venipunctures are so difficult and so time-consuming that the advantages of a rapid induction are wholly lost. Postoperatively, the patient may be troubled with hematoma, thrombosis, infection, or sloughing.

After long Pentothal anesthetics there often is prolonged somnolence. This may occur even though the patient initially regained most of his reflexes.

Other complications are reported. Recently a group of psychiatrists reported a number of reactions to Pentothal. They occasionally observed precipitous vomiting during induction. I have seen this on a few occasions. Some of their patients developed muscular spasms. These spasms were usually generalized, being either clonic or tonic in nature. Usually the spasms resembled those seen in decerebrate rigidity, but two of their patients had typical epileptic-like convulsions. They found that if the patient was subject to these spasms under Pentothal, spasm would recur with each treatment. Delayed reactions (one to twenty-four hours after their treatment) could be controlled with ACTH. These patients showed general malaise, weakness, fever up to 104° F, arthralgia, and skin rashes. All of their patients showed a temporary increase in general nervous tension.

There are contraindications to the use of Pentothal. They should be kept firmly in mind when the anesthetic is chosen. The one absolute requirement is that it should not be used in any situation in which control of the airway can not be guaranteed throughout the procedure and for some time afterwards. It means that Pentothal should not be used in any patient in whom there is likely to be incitement of laryngospasm by blood, pus, mucous, vomitus, or other foreign material, unless that patient is intubated. It also means that Pentothal should not be used in a patient when the position of the airway is going to be such that its patency can not be assured at all times. This excludes the use of Pentothal in patients in the prone position unless those patients are intubated. It should be used with caution in patients undergoing periosteal stripping or dilatation of the anal sphincter. Endotracheal intubation or endoscopy is hazardous under Pentothal hypnosis. The introduction of the laryngoscope or the endotracheal catheter is likely to incite laryngospasm which is difficult to control. The only safe way to intube a patient who is to receive Pentothal is to do so under topical anesthesia prior to the administration of the barbiturate. This is not difficult to do, but such a procedure certainly is not what the patient expects when he is told that he is to receive a Pentothal anesthetic.

It should be mentioned that Pentothal is more spasmogenic than other barbiturates because it is a thiobarbiturate, since it contains sulfur. In the last few years, other barbiturates that do not contain sulfur, have been used. Seconal, Evipal, and Nembutal have been given preceding intubations.

When given intravenously they provide a rapid induction rate without the tendency for laryngospasm to occur. They also produce a longer period of hypnosis, which is of assistance to the anesthetist.

Another way to reduce the incidence of apnea and laryngospasm under Pentothal is to allow five to ten minutes to elapse between the initial injection of the drug and the beginning of surgery. This permits the various signs of anesthesia to catch up with the concentration of the anesthetic agent that is actually present; there being a lag before the full effect of the Pentothal takes place. This measure is usually effective, but it is not what the surgeon expects when he requests a Pentothal induction.

Another contraindication to Pentothal is acidosis. Any respiratory depression in these patients may enhance the acidosis by causing retention of carbon dioxide in the tissues.

Any patient who has an asthmatic tendency should not be given Pentothal. Pulmonary ventilation will be further diminished by constriction of the bronchioles. Anemic patients are poor candidates for Pentothal. The decreased oxygen-carrying capacity of the blood is undesirable if respiratory depression occurs. Septic or cachetic patients will detoxify the drug slowly.

Pentothal should be avoided in patients who have acute infections of the neck. The sensitivity of the carotid sinus is altered in these individuals, hence depression of the medullary centers by this anesthetic agent may result in fatal respiratory depression.

I think that Pentothal anesthesia is definitely contraindicated in the presence of hemorrhage or shock. The peripheral circulatory dynamics are markedly altered during Pentothal anesthesia when associated with these two conditions. The response to blood replacement is poor. Beecher, who reported on thousands of Pentothal anesthetics given during World War II, state that, early in the war, deaths under this anesthetic were common. He notes that Pentothal destroys the sensitivity of the respiratory center to its normal chief stimulus, carbon dioxide. The carotid mechanism in the neck then maintains the respiratory stimulus — that of anoxia. He further notes that anoxia will stimulate the respirations just as powerfully under deep Pentothal anesthesia as it will under light anesthesia. Uninformed anesthetists may mistake this respiratory stimulation for a sign of light anesthesia and consequently administer more Pentothal. Thus, when the patient's oxygenation is below normal, the character of the respirations may be fatally misleading. Not only does the respiratory center lose its sensitivity to carbon dioxide under full Pentothal anesthesia, but under such circumstances, carbon dioxide becomes a true depressant. The use of carbon dioxide to stimulate respiration that has been depressed by too much Pentothal is contraindicated. Beecher lists the following contraindications to Pentothal: morphine overdosage; shock, whether present or anticipated; cervical inflammation; gas gangrene; prone positions; intracranial surgery, and, severe burns.

Certain basic rules in regard to Pentothal anesthesia must be followed. The drug should be considered only as an adjunct to the anesthesia. It is not an anesthetic, per se, and should not be used alone. To use it thus is to achieve a state of acute barbiturate poisoning which is distinguished from that produced by other barbiturates only by its relatively short duration.

The administration of oxygen is essential. A concentration of at least 40 per cent should be used. During prolonged procedures there is a decreased tolerance to Pentothal that prevents adequate blood oxygenation. Oxygen administration should be started early—maximum oxygenation should be reached as soon as possible. as this is difficult to accomplish after a period of Pentothal anesthesia. Some anesthesiologists recommend an induction by gas and oxygen preceding the Pentothal administration. This is an effective measure although it might not please the patient.

Pentothal should not be used during long anesthesias because denarcotization of the of the patient is delayed by the cumulative effect of the drug. To employ it in this manner is to lose one of the principal advantages of Pentothal.

It should be remembered that the patient who is to receive Pentothal should have the same preoperative preparation that others have. This includes evacuation of the hollow viscera. Regurgitation and aspiration during Pentothal anesthesia occurs with ease. Proper medication is essential. Morphine should be given to depress the metabolism and atropine is absolutely necessary to combat vagal stimulation.

I do not recommend this form of anesthesia for office practice or for ambulatory patients. The patient may be ataxic for several hours and some patients are irrational or hyperactive. Others lie narcotized for long periods of time.

While Pentothal may not be the agent of choice for routine use, I think it has done a service for anesthesiology by reviving an interest in nitrous oxide anesthesia. It has been useful as a basal drug to facilitate the use of nitrous oxide with generous amounts of oxygen for operations lasting an hour or less. Its administration should be kept within its sphere of clinical usefulness. To do otherwise will eventually bring the drug into disrepute.

The safety of the patient is the first consideration of the anesthesiologist. Aside from this, he is interested in administering an anesthetic which fulfills the demands of the surgeon and is as agreeable as possible to the patient. Patients should be assured that they will suffer no pain as a consequence of the operative procedure, but their preference as to the choice of agent should not be the final or determining factor in choosing the anesthetic. There is no one agent or technique that will permit the satisfactory performance of all surgical procedures according to the standards which have been mentioned. This is doubtless for the best, as it encourages individual study and evaluation of each patient.

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The Sprained Ankle

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Doctor Thomson states that a "sprain" is a syndrome. A few sprains may be simple and demand simple treatment. Many are complex and, while they show no x-ray evidence of bone injury, may involve serious damage to ligaments, muscles, and articular cartilege with dislocation of the astragalus and widening of the ankle mortice. These complex sprains must be as skilfully treated at fracture would be. He outlines the procedures he deems necessary.

EDITOR

We many times hear a person say, "I sprained my ankle years ago and it is still weak." That person has a true complaint and a measure of disability. Far too often the doctor who hears from a patient the story of a turned ankle, on finding swelling on the outer side of the foot and ankle, accepts the x-ray report of "No evidence of bone pathology" as the final word, considers the situation as a very minor accident and treats him accordingly with the result that the patient has a weak ankle.

There is an old adage that a sprain is often worse than a fracture of the ankle. The fact is that the term "sprain" refers to a syndrome rather than an exact diagnosis. True it is that the common sprain of the ankle is simply a capsular tear with a little tear of the ligamentous structures. However, there often occur extensive tearing of the ligaments, injury to the muscles, even injury to the articular cartilage, dislocation of the astragalus on the ankle mortise, and even a widening of the ankle mortise. Such dislocations or subluxations very often spring back to their normal relationship and show no bony pathology although there is an extensive injury.

Since the term "sprain" suggests a minor accident with swelling, pain, and spasm of the surrounding muscles without the drama of obvious displacement, deformity, and bony crepitus, it is proper that we consider the components of the joint which are damaged in the sprain syndrome and classify sprains according to the gravity of the damage that has occurred. Therefore, we classify those injuries in which there is a minor capsular tear and minor ligamentous tear with no disturbance of the relationship of the ankle mortise as "simple sprains" but those sprains in which there is extensive tearing and which can be shown to have a disruption of the stability of the ankle mortise we classify as "complex sprains" because the bones of the joint and the articular cartilage as well as ligaments, capsule, and synovial membrane are rather extensively damaged. Furthermore, any accident or fall resulting in a twisting wrench of the foot may injure the ankle and be followed by sufficient swelling to obscure a marked displacement or fracture. Therefore it is essential that we differentiate a sprained ankle from:

1. Fracture of the malleoli;
2. Fracture dislocations of the ankle;
3. Fractures of the os calcis;
4. Fracture and dislocation of the astragalus;
5. Subastragalar dislocation;
6. Fracture of the scaphoid or of the accessory scaphoid;
7. Fracture of the os trigonum;
8. Fracture of the base of the 5th metatarsal; and,
9. Rupture of the tendo achillis.

Fortunately, with the exception of rupture of the tendo achillis, proper x-ray examination will usually disclose these other conditions.

Should the initial x-rays show no evidence of bone pathology or fracture, unless the patient is seen very shortly after the injury before a great deal of swelling has taken place, it would be better to treat him by putting on a sponge rubber tamponage with the foot held in a neutral position, applying an elastic pressure bandage over the foot and the sponge rubber tamponage. This will, in the course of 24 or 48 hours, reduce the swelling. If the patient is kept in bed with the foot and leg elevated on pillows or on a frame, much of the pain and spasm will have disappeared in that length of time and a more adequate examination can then be made.

If there is any evidence that there has been an extensive tear or possibly a complex sprain, it is necessary to give some type of anesthetic. We prefer ordinarily a 2 per cent Procaine anesthesia and use 25 or 30 cc. injected into the region of tenderness and into the joint if possible. Once this has disseminated into the tissues, manipulation can be accomplished in most of these cases so that one can evaluate the amount of tear and abnormal mobility present in the ankle mortise. Sometimes it is necessary to use a short Pentothal anesthesia to obtain sufficient relaxation to make a proper examination.

In the treatment of simple sprains without any evidence of extensive ligamentous tear, a basket-weave strapping is usually sufficient to give stability and protection for the desired length of time. In a young individual who is athletic, it is possible to regain the function of the ankle in two or three weeks. However, in older persons, the healing period will take from a month to six weeks. One must remember that sufficient time must be allowed for these soft tissues to heal after injury.

The treatment of many of these sprains by using Procaine and allowing the patient to use the ankle freely in athletics is not to be condoned because of the fact that he may have a great deal of trouble following a procedure of this character, and it does not give nature an opportunity to heal the torn soft tissue structures.

I recall the story told by a surgeon who is accustomed to attending the injuries of the football team. Their fullback had a sprained ankle just a few days before a very important football game and the trainers and the commentators had stressed the possibilities of procaine treatment to the extent that the surgeon finally gave in and the day before the game had the ankle given a thorough infiltration of procaine and also took the precaution of having the sural nerve blocked. Then, to give the player further protection, he gave him a very strong, heavy adhesive plaster strapping. The result was that he played in the game but he simply didn't perform as he had been able to in the previous competitions. When the doctor asked him after the game if his ankle hurt him, he said, "No, the ankle didn't hurt me in the least but I never could tell where my foot was." In other words, he had such good anesthesia that he wasn't able to make the foot and ankle work normally.

It is our opinion that it is far better to give nature the opportunity of healing these injuries rather than to force activity, thus preventing the processes of healing from being normally furthered.

Complex sprains where, in addition to the swelling and pain, there is an abnormal mobility of the astralagus, must be treated much as one would treat a fracture. A very carefully applied cast should be put on with adequate protection over the bony prominence and with the foot at a right angle or nearly so. The cast should extend from the toes to a point just below the knee. However, the dorsal surface of the toes should be left free so that they may move constantly and keep up a measure of muscle tonicity. Sometimes when there is a tear of the tibiofibular ligament which holds the external malleolus against the tibia, it is necessary to put the foot up in inversion, but the cast so applied should not be left on more than two weeks. Then the foot should be brought again to the neutral position and a second walking cast put on to be worn for a period of a month or six weeks, depending upon the extent of the injury and the age of the patient.

Much has been said about operative treatment of these severe sprains. There is only one place in which operation is indicated and that is in the separations of the tibiofibular ligament which can not be held by positioning the foot in inversion. Here a long nail, screw, or bolt through the fibula and imbeded thoroughly into the tibia can be applied which will hold this mechanism together while healing takes place. It would be just about as appropriate to try to sew ligaments together as it would to try to sew paint brushes together, because the structures are such that whatever threads one might use would simply pull through the fibers of the torn ligaments.

Some of these very severe injuries need an inside iron brace with an outside T-strap and a lift on the outer side of the heel. In those cases that show weakness after they have completed their active treatment or in those who have recurrent sprains, an outflare heel is a very helpful feature.

Most of these injuries do not have any complications. Once in a while one will see an interference with circulation which is due to extensive injury or to a traumatic vasospasm or local shock. Then also, there are the circulatory conditions which appear with heart incompetency and other diseases, such as diabetes, gout, and the like.

Usually the convalescence is not difficult but when these complications occur, there is often extensive atrophy, adhesions, and traumatic arthritis. The treatment of such complicating, disturbing, convalescent features is sometimes rather discouraging but whirlpool baths, contrast baths, paraffin baths, and exercises, particularly of the non-weight-bearing type, help considerably. We have used, with uncertain success, intravenous procaine and, with some rather startling and gratifying results, compound F injected into the joint.

The purpose of this discussion has been to draw attention particularly to the importance of accurate diagnosis and evaluation of the extent of the injury that has occurred in sprains of the ankle and to emphasize the importance of proper management and treatment of these conditions thereby preventing the unfortunate complications and sequelae that frequently occur.

DRUG WHICH MAY CURE MALARIA BEING TESTED BY ARMY RESEARCHERS

Daraprim, a drug which has given indications of being the most effective agent ever used in the treatment of malaria, is being subjected to Army research studies, the Department of the Army announced recently.

For as long as one year after being infected by malaria-carrying mosquitoes, prisoners at the federal penitentiary at Atlanta, Georgia, who volunteered for experiments with Daraprim, showed no signs of malaria, Major General George E. Armstrong, Surgeon General of the Army, revealed. He stressed the fact that further test of the drug is needed.

Army physicians now use two drugs in fighting malaria. Chloroquine is used as a suppressant. Weekly doses of it have to be given. If doses are stopped, malaria will show up in men attacked by the relapsing form of the disease. A second drug, Primaquine, is given to prevent relapses. Daraprim, however, gives indications of both suppressing and curing malaria.

Daraprim has been tested against some of the toughest known strains of malaria. Research personnel who tested Daraprim in Africa, treated every person in an isolated village where most inhabitants were infected with malaria. The villagers were cured within about two months. After that not one of the 100 mosquitoes captured in and around the village was found to have malaria parasites in its body.

The new drug is easy to take and no bad after effects have been observed. It is made up in tablet form about the size of an aspirin and is inexpensive to manufacture. At the present time, howover, Daraprim is in limited supply.

". . . In the wards of the hospital you learn the great principles of disease, and the more important rules of surgery, but you have not the opportunity of learning the whole of what you require to know for the purposes of private practice . . ." Lecture on Sero-Cystic Tumors of the Breast by Brodie: London Medical Gazette, 25:808, 1840.

Hoarseness

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Doctor O'Neil first presents important facts relating to the anatomy and physio-pathology of the larynx, then classifies the symptom, hoarseness from the etiological and clinical viewpoints. He rightfully stresses the importance of this symptom, and, of determining its cause without delay. He presents a series of cases, briefly but pointedly, and illustrates a major portion of the conditions producing the leading symptom, hoarseness.

EDITOR

Hoarseness is a noticeable change in the quality of the normal voice, produced by a recognizable change in the anatomy or physiology of the larynx. While it may occur as an acute or chronic complaint this clinical symptom demands the prompt attention of every physician. Because of the importance of this subject and the many conditions entering into its etiology we should like to present a practical consideration of this problem, illustrated by representative cases. A brief review of the anatomy and physiopathology of hoarseness will best serve as an introduction.

ANATOMY

The larynx is composed of three single and three paired cartilages (cricoid, thyroid, epiglottis, corniculate, cuneiform, and arytenoid), bound together by ligaments and muscles and lined by mucous membrane. From the vocal processes of the arytenoid, the vocal cords stretch in a posterior-anterior direction horizontally across the lumen of the larynx.

Suspended from the hyoid bone, the larynx is situated in the midline of the neck and opens above into the pharynx while below it is continuous with the trachea. It is bounded anteriorly by the cervical fascia and skin, laterally by the thyroid gland and the strap muscles of the neck (sterno-hyoid, thyrohyoid, omohyoid, and constrictor muscles) and posteriorly by the hypo-pharynx.

Vocal cord action is accomplished by the intra-laryngeal muscles acting upon the arytenoids. Abduction, opening of the vocal cords, results from the posterior cricoarytenoid muscle pulling downward and backward on the lateral muscular processes of the arytenoids, rotating them posterior-medially and by so doing, carrying each vocal process and vocal cord away from the midline. Adduction, closing the vocal cords, is achieved by the inner arytenoid muscles with the posterior third of the vocal cords pulling toward the midline and the thyroarytenoid muscles pulling on the anterior lateral surfaces of each arytenoid, approximating the anterior two thirds of the vocal cords. Tension resulting in phonation is produced by the cricothyroid muscles pulling the cricoid arch up around the inferior cornu of the fixed thyroid cartilage, thus forcing the arytenoid posteriorly and stretching and tensing the vocal cords.

These intra-laryngeal muscles are supplied, with the exception of the crico-thyroid, by the inferior laryngeal branch of the recurrent laryngeal nerve. The cricothyroid is supplied by the external branch of the superior laryngeal. Because of the importance of the recurrent laryngeal nerve and its frequent involvement in laryngeal paralysis resulting in hoarseness, it seems advisable to briefly review its course thus showing the possible sites of pathological involvement.

The recurrent laryngeal nerve is the most important branch of the vagus given off in the neck. On the right it arises in front of the subclavian artery, passes behind this vessel and ascends obliquely to the side of the trachea. On the left it originates to the left of the arch of the aorta, passes below the aorta and ascends to the side of the trachea. On both sides the nerve lies in the groove between the trachea and the esophagus before passing under the inferior constrictor to enter the larynx behind the articulation of the inferior cornu of the thyroid with the cricoid.

PHYSIO-PATHOLOGY

Normal sound is produced by the larynx acting upon the steady stream of expired air from the lungs. The expired column of air from the lungs approaches the approximated vocal cords whose tense edges acting upon the expired air result in sound. Traveling upward, this sound or voice is supplemented and reinforced by the pharynx, mouth, and nasal cavities, giving it the quality of resonance.

Impairment of vocal cord action upon this expired stream of air will result in hoarseness. This impairment may occur in any condition where the virbation, approximation, or tension of the true vocal cords is impaired. Thus, accumulated secretions or tumors arising from the cords may dampen normal vibrations. Paresis or paralysis of the intralaryngeal musculature will result in an incomplete approximation of the cords with a resultant interference in their vibrations. Premature approximation of the ventricular bands, the false cords, impairs the vibration of the underlying true cords and hoarseness will result.

ETIOLOGICAL CLASSIFICATION

In view of the anatomy and physiopathology of hoarseness it is seen that the diagnosis of the underlying cause is sometimes a difficult task. The etiological agent may be an organic disease in the larynx, in the neck or mediastinum, or in the central nervous system.

TABLE 1
ETIOLOGICAL CLASSIFICATION OF HOARSENESS

I. Organic Disease of the Larynx
  - Angioneurotic edema
  - Scleroma
  - Ventricle prolapse
  - Dislocation of laryngeal joints
  - Pachydermia
  - Foreign body
  - Laryngospasm
  - Neoplasms
  - Arthritic changes of the laryngeal joints
  - Cicatrices
  - Stenosis
  - Trauma
  - Phonation by ventricular bands
  - Puberty
  - Inflammation
  - Vocal abuse
  - Paresis
  - Paralysis

II. Neck. Mediastinum
  - Neoplasm
  - Goiter
  - Pleural thickening
  - Left auricular dilatation
  - Pericardial effusion
  - Apical tuberculosis
  - Aneurysm
  - Bronchogenic carcinoma
  - Hodgkin's disease
  - Esophageal carcinoma

III. Central Nervous System
  - Hemorrhage
  - Hysteria
  - Syphilis
  - Disseminated sclerosis
  - Tabes
  - Syringomyelia

CLINICAL CLASSIFICATION

To reduce this comprehensive etiological classification to a practical clinical level, it has been found helpful to consider hoarseness as primal, periodic, or persistent.

For example, primal hoarseness is that change in the normal voice occurring in the patient for the first time and may be on an inflammatory, allergic, or neoplastic basis. It is characterized by a sudden onset and frequently is accompanied by chills and fever. It may progress to aphonia with localized pain in the larynx, associated with a paroxysmal cough.

Periodic hoarseness is seen clinically in those patients presenting themselves with recurrent attacks of hoarseness. It, too, may be due to inflammatory, allergic, or neoplastic changes in the larynx. The inflammatory changes are usually localized to the vocal cords themselves with marked redness, swelling, and thickening. These inflammatory cord-changes are frequently aggravated by the irritating secretion from a sinusitis or tracheobronchitis. Allergic laryngeal changes responsible for periodic hoarseness have been observed in polypoid cord-changes and in diffuse boggy edematous changes of the true vocal cords. Neoplasms responsible for periodic hoarseness are generally benign, such as the vocal nodules which are due to vocal abuse. As a rule, this group of periodic hoarseness is characterized by rather marked anxiety due to the recurrent nature of the underlying disorder.

Persistent hoarseness is commonly due to chronic inflammatory changes or allergic alterations of the true cords themselves, but more frequently is due to a neoplastic process involving the anterior third of either one or both cords. It is characterized by persistent hoarseness with periods of aphonia, laryngeal pain referred to the ears, chronic cough, and continual clearing of throat.

TABLE 2
CLINICAL CLASSIFICATION OF HOARSENESS

I. Primal
  - Acute inflammations
  - Allergic
  - Neoplastic
  - Characteristics
    - Sudden oset
    - Chills and fever
    - Aphonia
    - Paroxysmal cough
    - Laryngeal pain

II. Periodic
  - Recurrent inflammations
  - Allergic
    - Cordal polyps
    - Diffuse edema of cords

- Neoplastic
  - Vocal nodules
  - Papillomata
- Characteristics
  - Periods of normal voice
  - Anxiety

III. Persistent
- Chronic inflammations
- Allergic
  - Polyps
- Neoplastic
  - Keratosis
  - Dyskeratosis
  - Carcinoma
- Neurogenic
  - Paresis
  - Paralysis
- Characteristics
  - Persistent hoarseness
  - Periods of aphonia
  - Local and referred pain
  - Chronic cough
  - Continual clearing of throat

DIAGNOSIS

Because of the many possible etiological factors involved in the production of hoarseness, the diagnosis of the essential factor responsible is frequently difficult. For although a mirror examination, which should be routine in the careful work-up of every patient, together with a direct laryngoscopic examination, freqently reveals the cause of the hoarseness, occasionally these two procedures are only the beginning in determining the cause.

When these two procedures fail to supply a satisfactory explanation for the patient's hoarseness, it becomes the responsibility of the physician to approach the problem in a systematic fashion, utilizing all the diagnostic facilities at his disposal.

A detailed history of the hoarseness with the careful recording of the nature, onset, and duration together with any lesser complaints should be carefully recorded. The present illness should be investigated as thoroughly as possible together with a brief, pertinent family and past history. In the past history any previous neck surgery is of extreme importance. Indirect and direct laryngoscopic examinations should be repeated as necessary, together with careful palpation of the neck and laryngeal cartilages. X-ray studies of the chest, esophagus, and larynx should be routine when the etiology cannot be readily determined. Finally, a general medical and complete neurological examination should be carried out when necessary, because the symptom of hoarseness demands the earliest recognition of its cause in order to institute satisfactory treatment.

TABLE 3

DIAGNOSIS OF HOARSENESS

I. History
- Onset, nature, duration
- Present illness
- Past history

II. Laryngeal examination
- Indirect
- Direct
- Biopsy

III. X-Ray
- Chest
- Esophograms
- Larynx

IV. General medical examination

V. Complete neurological examination

TREATMENT

Rational therapy of hoarseness is dependent upon an accurate diagnosis of the underlying cause. When the cause for the hoarseness is found to be something other than an organic disorder of the larynx it is advisable to enlist the aid of an internist, neurologist, or psychiatrist. Organic diseases of the larynx producing hoarseness are best treated by the otolaryngologist and laryngeal surgeon.

Absolute voice rest is the best single therapeutic agent in the treatment of many of the inflammatory and allergic, organic disorders of the larynx. When combined with specific antibiotic and anti-allergic therapy, the laryngeal structures will soon clear resulting in a return of the normal voice. Vocal abuse and improper phonatory habits require a painstaking explanation to the patient with a re-education on the use of laryngeal structures, before the hoarseness will disappear.

Stenosis, cicatrices, foreign bodies, and benign tumors producing hoarseness can effectively be treated through a direct laryngoscope by a laryngeal surgeon. Carcinoma limited to one vocal cord resulting in hoarseness can be satisfactorily treated by an external approach and resection of the involved cord. Bilateral cord involvement with carcinoma necessitates a total laryngectomy. In bilateral cord paralysis the laryngeal surgeon can use either the external approach to disarticulate, free, and fix one arytenoid to the upper border of the thyroid cartilage after the method of Kelly and King or endolaryngeally, using the method of Thornell.

To further illustrate the treatment of hoarseness, the following representative cases giving the history, examination, treatment, and results are presented.

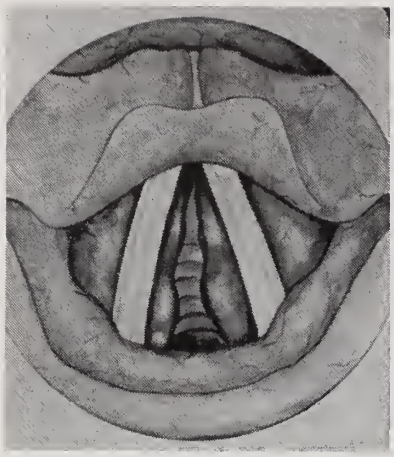

Fig. 1

ACUTE LARYNGITIS

A.K., white female, 39 years of age.

History: Hoarseness, 2 weeks. Onset following an acute upper respiratory infection with bilateral maxillary sinusitis. Indirect laryngeal examination revealed an acute laryngitis secondary to an acute upper respiratory infection and sinusitis.

Treatment: Medical regime. Antral irrigations. Voice rest.

Result: Uneventful recovery with return of normal voice.

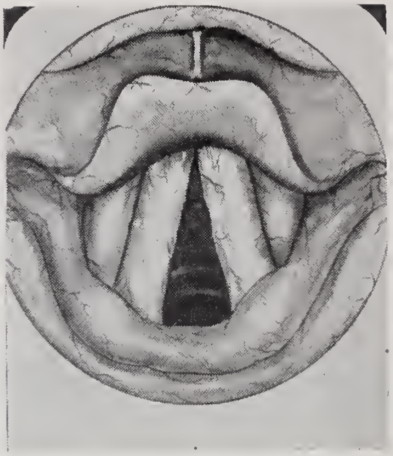

Fig. 2

CHRONIC LARYNGITIS

H.B., white female, 45 years.

History: Hoarseness, 8 months, worse in last two months. Chronic smoker and chronic dry cough. Indirect laryngeal examination revealed moderate thickening with marked congestion of both vocal cords without sign of neoplasm. Chest x-rays were negative.

Treatment: Medical management. No smoking. Strict voice rest.

Result: Marked improvement in ten days with complete return of normal voice and cessation of cough in three weeks.

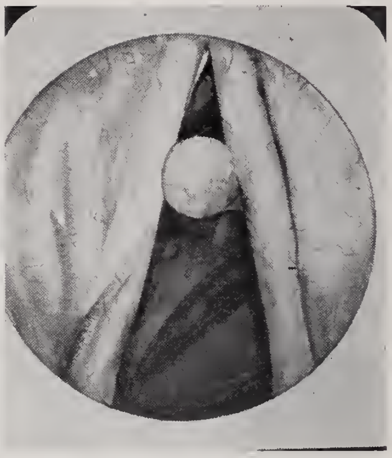

Fig. 3

POLYP OF LARYNX

N.G., white male, 55 years.

History: Hoarseness with aphonia, 3 months. Indirect laryngeal examination revealed tumor mass involving anterior third of right vocal cord. Direct laryngoscopy and biopsy carried out. Tissue reported as benign polyp of right vocal cord.

Treatment: Endolaryngeal removal.

Result: Normal voice in 10 days. Symptom free to date.

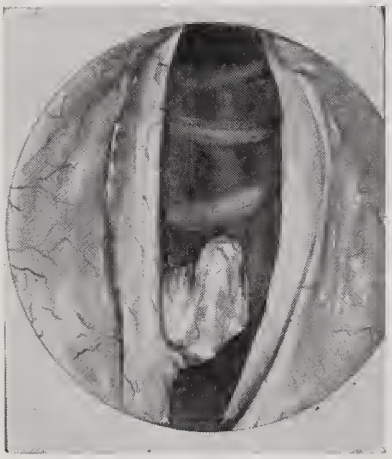

Fig. 4

POLYP AND MUCOID METAPLASIA OF LARYNX

M.W., white female, 30 years.

History: Intermittent hoarseness with aphonia, 6 months. Laryngeal examination revealed a polypoid-like mass on the middle third of left vocal cord.

Treatment: Endolaryngeal removal of tissue which was histologically reported as a benign polyp with mucoid metaplasia.

Result: Normal voice. Symptom free.

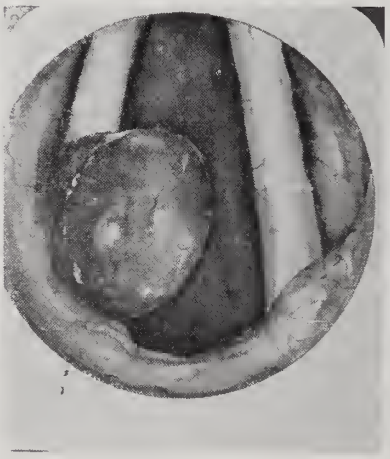

Fig. 5

CONTACT ULCER AND GRANULOMA OF LARYNX

E.J., white male, 47 years.

History: Hoarseness, 9 months. Sudden onset, persistent despite several endolaryngeal removals of tissue, which recurred. Indirect laryngeal examination revealed a mass of granulation-like tissue on posterior third of left vocal cord near arytenoid.

Treatment: Endolaryngeal removal of granulation tissue which was histologically a non-specific granuloma with a contact ulcer. Phonating edge of vocal cord was aligned and patient placed in hands of speech correctionist.

Result: Marked improvement in voice which is gradually returning to normal with correction of faulty speech mechanism.

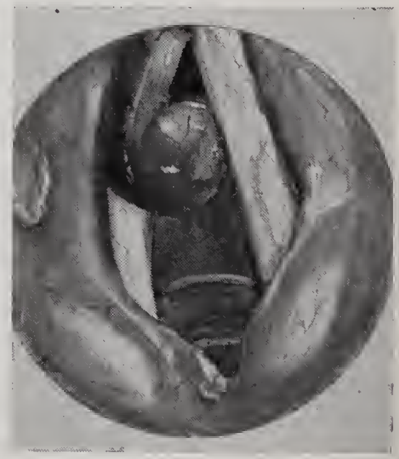

Fig. 6

VASCULAR POLYP LEFT VOCAL CORD

G.D., white male, 38 years.

History: Hoarseness, 6 weeks. Indirect and direct laryngeal examination revealed a hemorrhagic polypoid tumor on anterior third of left vocal cord resembling a hemangioma.

Treatment: Endolaryngeal removal of tumor which histologically was reported as a vascular polyp.

Result: Normal voice in 10 days. Symptom free.

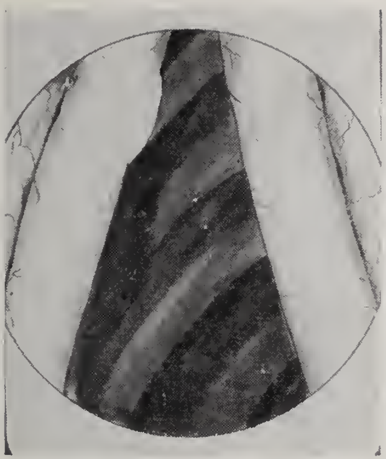

Fig. 7

KERATOSIS OF LARYNX

F.Mc., white male, 52 years.

History: Hoarseness, 6 months, progressively worse. Indirect laryngeal examination revealed whitish elevated thickened area involving middle third of left vocal cord. Direct laryngoscopy confirmed these findings and biopsy were reported as keratosis of left vocal cord.

Treatment: Endolaryngeal removal of keratotic area with straightening of phonating edge of vocal cord.

Result: Symptom free. No recurrence of keratotic area.

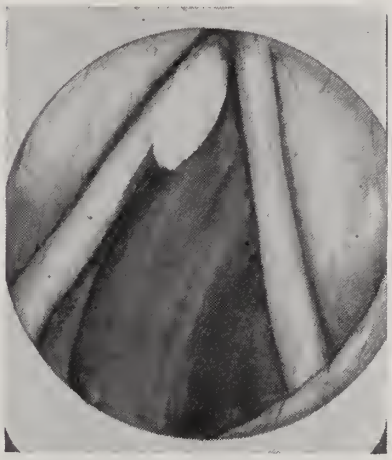

Fig. 8

EARLY BENIGN APPEARING CARCINOMA OF LARYNX WITH UNILATERAL CORD INVOLVEMENT

E.L., white male, 67 years.

History: Hoarseness, 2 months. Indirect laryngeal examination revealed a grayish appearing elevated nodule on anterior third of left vocal cord, which appeared to be a benign vocal nodule. Direct laryngoscopy and biopsy revealed it to be a squamous cell carcinoma of the larynx.

Treatment: Extralaryngeal approach with resection of the involved cord.

Result: No recurrence after 2 years. Serviceable voice.

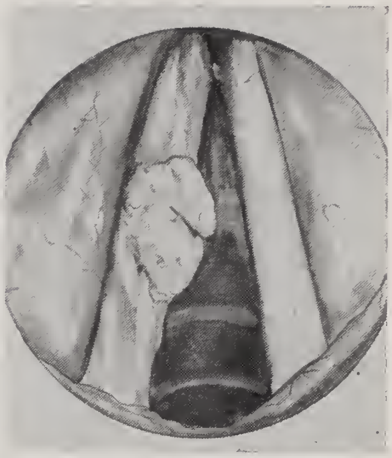

Fig. 9

EARLY LARYNGEAL CARCINOMA WITH UNILATERAL CORD INVOLVEMENT

T.P., white male, 57 years.

History: Hoarseness, 2 months. following sore throat. Indirect laryngeal examination revealed a large bulky neoplastic lesion on middle third of left vocal cord. Biopsy was reported as squamous cell carcinoma.

Treatment: Extralaryngeal approach with resection of involved cord.

Result: No recurrence. Serviceable voice.

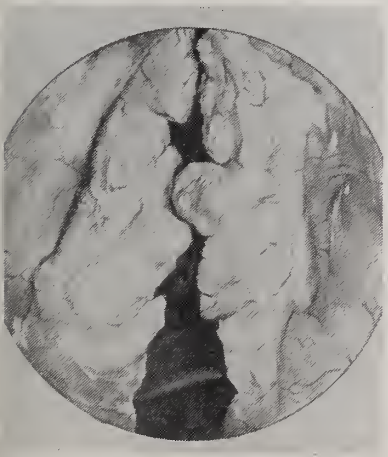

Fig. 10

LARYNGEAL CARCINOMA INVOLVING BOTH VOCAL CORDS AND ANTERIOR COMMISSURE

J.B., white female, 24 years.

History: Hoarseness, all her life. Repeated direct laryngoscopies with biopsies showed multiple papillomata of both vocal cords and anterior commissure until biopsy 2-28-50 showed carcinomamatous degeneration of papillomata involving both vocal cords and anterior commissure.

Treatment: Total laryngectomy.

Result: Three year cure with no recurrence. Pharyngeal speech has rehabilitated patient to position of office employee.

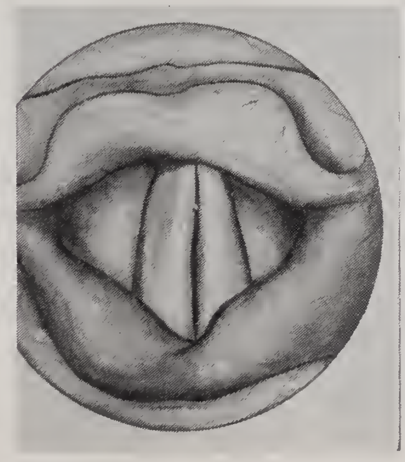

Fig. 11

POST THYROIDECTOMY BILATERAL CORD PARALYSIS

A.G., white female, 62 years.

History: Hoarseness and dyspnea following thyroidectomy. Indirect and direct laryngoscopic examinations revealed a bilateral abductor paralysis.

Treatment: Extralaryngeal approach with fixation of right arytenoid and cord laterally.

Result: Serviceable voice. Dyspnea free.

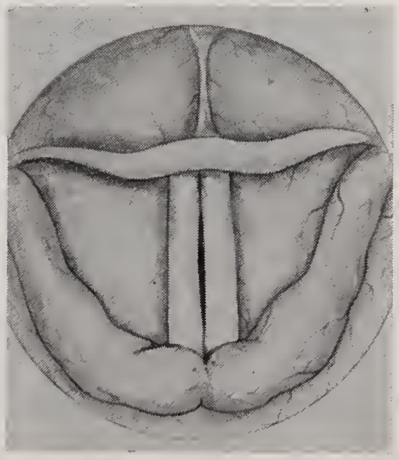

Fig. 12

HYSTERIA CAUSING HOARSENESS

H.G., white female, 40 years.

History: Hoarseness with aphonia, 30 years following blow to neck by baseball. Laryngeal examination revealed a normal larynx.

Treatment: Psychiatric therapy.

Result: Favorable response with improvement in voice to date.

MEDICAL ILLUSTRATIONS BY GENE L. JOHNSEN

SUMMARY AND CONCLUSION

A brief resume of the clinical symptom of hoarseness has been presented. The pertinent anatomy and physio-pathology has been reviewed. An etiological classification from which is derived a practical clinical classificaton of hoarseness was considered. A systematic approach to the multiple factors frequently involved in the production of hoarseness and of paramount importance in diagnosis was given. Based upon the diagnosis of the underlying cause of the hoarseness, a brief consideration of its rational therapy illustrated by representative cases was presented.

In conclusion it is to be reiterated that while even the patient can tell he is hoarse, the possible etiological agents in the production of his hoarseness are many and, since his life frequently depends upon an early diagnosis, this symptom complex demands the prompt attention of every physician.

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Fifty Cases of Peptic Ulcer in University Students*

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Doctor Brolsma presents data derived from study of fifty young university men who presented atypical subjective, but typical and conclusive objective findings of peptic ulcer. He concludes that ulcer is probably underdiagnosed in this age-group; that data about complications and response to therapy parallel published data concerning older people who suffer with peptic ulcer; and, that in young persons who exhibit symptoms of altered gastrointestinal physiology, complete evaluation of the stomach and intestines by all available methods should be carried out.

EDITOR

PURPOSE

The following paper describes the author's experience with peptic ulcer in the younger age group. This series is unique in that comparable statistics or papers on this phase of the peptic ulcer-problem are not readily available or commonly described in the literature. Jennison(3) reported 7 per cent of 2,700 persons employed by a large life insurance company showed evidence of duodenal ulcer. Portis and Jaffee(5) reported the incidence of peptic ulcer to be 5.23 per cent in white people and 3.5 per cent in Negroes in a series of 9,171 autopsies. Robertson and Hargis(6) found evidence of peptic ulcer in 11.85 per cent of 2,000 cadavers examined at the Mayo Clinic. Other available statistics reveal the incidence of ulcer to be at least 10 per cent of the population, with reference to the adult male sex. With the advent of World War I and World War II, peptic ulcer is becoming either more common or more cases are being diagnosed and reported. Hinton's(2) statistics indicate that the incidence of death due to peptic ulcer was twice as high in 1933 as in 1900. Recent statistics published by a leading life insurance company(4) reveal interesting facts covering the mortality experience with regard to peptic ulcer. These are shown in the following table, and represent data for the year 1948.

TABLE I
(White Population U.S.A.)

Cause of Death	Number All Ages	Percent of Deaths All Ages	0-1	1-24	24-44	45-64	65 and over
All Causes (White Male)	725,818	100	7.4	4.5	8.0	30.5	49.6
Peptic Ulcer (White Male)	6,618	100	0.4	0.6	10.9	49.5	38.6
All Causes (White Female)	544,771	100	7.1	3.7	7.0	23.1	59.1
Peptic Ulcer (White Female)	1,409	100	0.9	0.9	10.8	33.0	54.4

—Metropolitan Life Insurance Co.(4)

It appears that the highest mortality for the white male occurred in the fourth and fifth decades, while in the white female it occurred in the sixth decade and on. These, of course, are mortality statistics and do not represent information relative to the time of onset or length of disability due to the ulcer process. It is interesting to note there is a relatively large increase in percentage for both male and female at the twenty-fourth year of life. These statistics become more impressive if it is remembered that many cases are never diagnosed, and of the diagnosed cases few die as a direct result of the ulcer or its effects.

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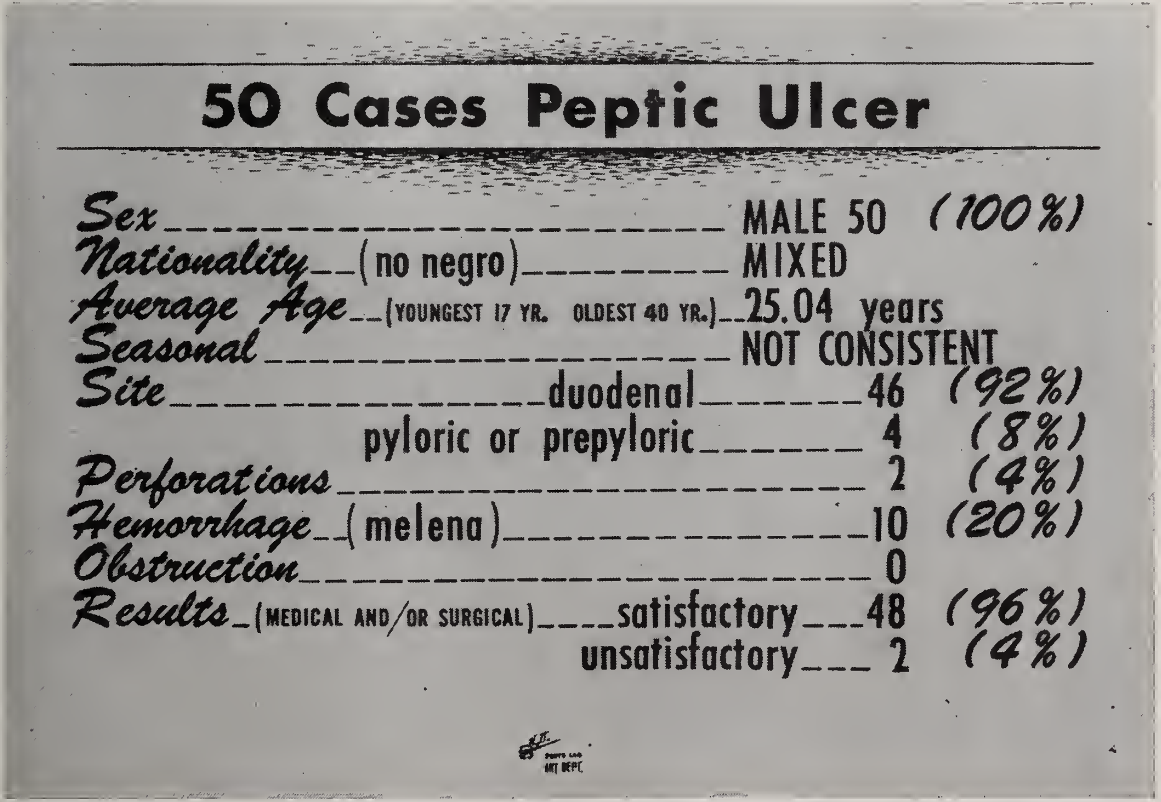
*Presented before the Regional Meeting of the American College of Physicians, March 29, 1952, Lincoln, Nebraska.

A review of the literature on this voluminous subject is impractical at this time. In recent years the literature has contained many interesting articles dealing with the special problems of peptic ulcer in the newborn and in the aged.

This series of cases deals with a group of healthy young males who, in all probability, are universally denied much sympathy or medical care for their common complaints of gas, cramps, or indigestion. We are all aware of the extremes of gastrointestinal supply and demand that exists on a college campus; from the ravenous appetite of the athlete to the temperamental appetite of the research worker. With such dietary habits and the added tension factor of competitive education it is obvious that the incidence of functional disorders will be high.



50 Cases Peptic Ulcer

Sex .... MALE 50 *(100%)*
Nationality __(no negro)________ MIXED
Average Age __(YOUNGEST 17 YR. OLDEST 40 YR.)__25.04 years
Seasonal ________________ NOT CONSISTENT
Site _______________duodenal_______46 *(92%)*
pyloric or prepyloric______ 4 *(8%)*
Perforations ____________________ 2 *(4%)*
Hemorrhage __(melena)_______________10 *(20%)*
Obstruction ______________________ 0
Results _(MEDICAL AND/OR SURGICAL)____satisfactory___48 *(96%)*
unsatisfactory___ 2 *(4%)*

Figure 1

At the end of World War II, a naval medical publication cited a large series of cases studied with reference to gastrointestinal complaints. Their conclusions were: 1. Immediate stress and anxiety of war did not, apparently, predispose one to form a peptic ulcer; 2. stress did not increase the complications of existing or pre-existing peptic ulcers.

This series includes a young age group of which only about 25 per cent have been in military service. What role chronic anxiety played in these cases is hard to determine.

It will be shown however, that history and subjective symptoms are unreliable guides to differentiate organic from functional gastrointestinal patterns, at least in this age group. This survey pointedly illustrates the need of a careful diagnostic work-up, including x-ray, of all individals who have subjective symptoms, or objective findings of altered gastrointestinal physiology.

MATERIAL

The group presented here are or were students at the University of Nebraska, and were studied at the Student Health Center on the University campus over a two year period (1949-1951).

METHOD

All cases herein reported received the benefit of a detailed medical work-up, including careful history and physical, complete blood count, urinalysis, gastric analysis, and one or more upper gastrointestinal x-rays.

No case has been included which did not have subjective complaints, objective findings, and x-ray evidence of peptic ulcer.

ILLUSTRATIVE CASES

As noted on Figure 1, all patients were men with an average age of 25.04 years. The nationality was mixed, but there are no negroes reported in this series. Subjective symptoms were unreliable, and in most cases followed no typical seasonal cycle or pain-food-relief pattern. Laboratory findings were not tabulated but there was no consistant relationship demonstrated between hyperacidity and ulcer-activity; there was, however, no case with achlorhydria.

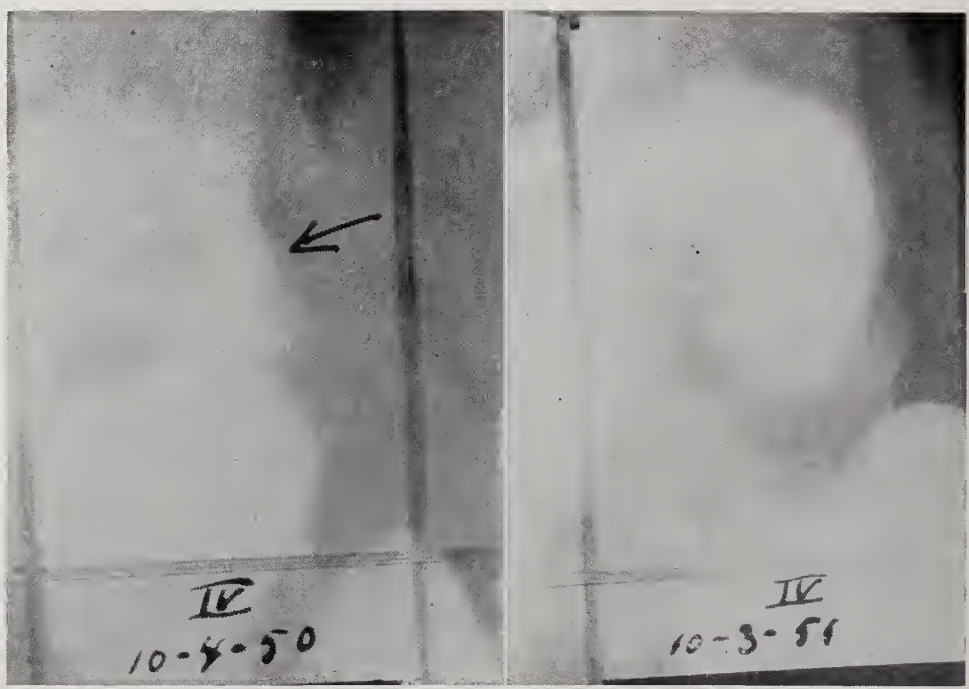


Fig. 2. Thirty year old Chinese male. History of melena six weeks prior to admission. Arrow points to crater and retraction defect on greater curvature of duodenal cap. Progress film shows complete healing of previous deformity one year later.

The four cases listed as pyloric or prepyloric ulcer were particularly difficult to follow. All declined gastroscopy and three were not enrolled in school after the current semester. The fourth had satisfactory healing of his pyloric ulcer as shown on subsequent x-rays, and the importance of routine examination was thoroughly discussed.

The two reported cases of perforation occured prior to coming under our observation at the Student Health Center. These patients had no typical ulcer distress pattern prior to their perforation as far as could be determined by direct questioning.

It was interesting to note the number of patients who had gastrointestinal bleeding in this age group, without evidence of alteration of their blood coagulation mechanism. Only one patient had massive hemorrhage, with both hematemesis and melena. This occurred in a seventeen-year-old white male who had two previous episodes of melena over a three year period. By all criteria he would be considered an ideal candidate for a subtotal gastrectomy and this was recommended; however, because of his age and youthful immature insight, he decided against the procedure. His father and uncle both had had peptic ulcer without surgical intervention; however, as far as can be determined, neither one of them had the complication of hemorrhage. This case brings up the question of familial diathesis for peptic ulcer.

It should be added that all patients with bleeding, except the one mentioned above, were treated expectantly, on an ambulatory basis and promptly were relieved of subjective complaints and objective findings of ulcer-activity and hemorrhage.

The two patients reported as unsatisfactorily treated had associated neuropsychiatric problems and were not adjusting well to school or their ulcer regime. Both dropped out of school after their initial medical study.

FOLLOW-UP

A college group of this type is obviously hard to control for adequate follow-up. To date no patient has returned to Student Health with any of the complications of peptic ulcer (hemmorhage, obstruction, or penetration). A number have returned with recurrent subjective complaints, associated more with the abandonment of their ulcer program than seasonal variation. Also, the emotional stress of final examinations seemed to precipitate distress in a few of the patients. Many have since graduated or left the University. Some are still in school and follow the program as outlined, using medication as needed, without deleterious side effects or complications. One patient is still competing in the University athletic program without difficulty. In some cases it was difficult to motivate them to voluntarily report to the Student Health Center for routine office calls; however, adequate follow-up was maintained by telephone or summons by mail to report for current evaluation of their ulcer-status. Subsequent gastrointestinal x-rays were used only as indicated, and not by any pre-formulated plan. As a group there was good patient cooperation, with evidence of adequate interest and insight to insure a fairly favorable prognosis in this series of medically managed ulcer cases.

TREATMENT

All cases were treated with the same general routine: diet, one glass of homogenized milk at room temperature at 10:00 a.m. and 3:00 p.m., anti-spasmodic drugs, antacids (methylcellulose and/or aluminum hydroxide gel), and with instructions to abstain from tobacco and alcoholic beverages. Anticholinergic drug therapy was not used in this group. They were further advised to avoid all ice cold food and drink, which seemed to be more detrimental to the satisfactory progress of an ulcer than mild dietary indiscretions. Transfusion was used in one bleeding case.

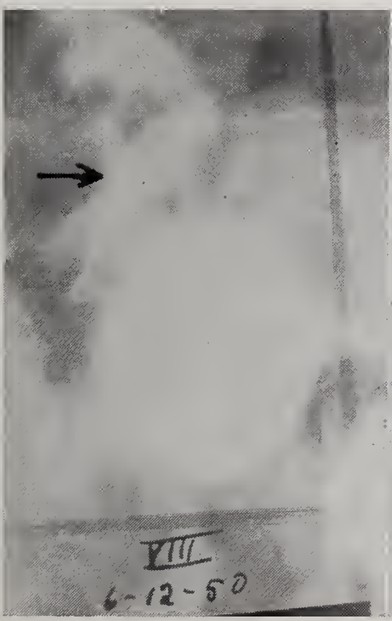


Fig. 3. Twenty-five year old Italian male. Subjective symptoms one year prior to admission with no hemorrhage. Arrow points to a typical posterior wall crater in the duodenal cap with radiating mucosal folds, the so-called "stellate sign."

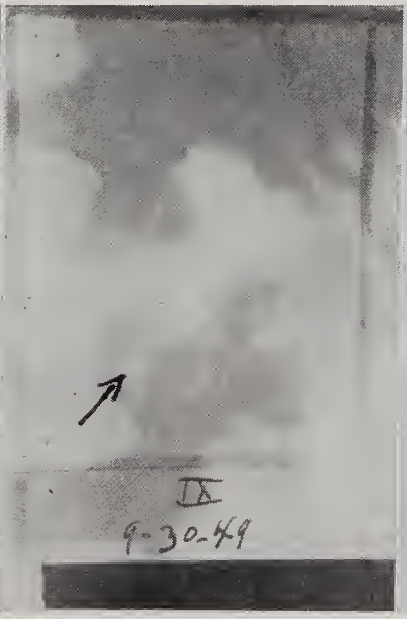


Fig. 4. Nineteen year old white male. History of perforated ulcer eight months previously. Current symptoms present two to three months. Film shows the deformed duodenal cap from previous perforation and surgery. Arrow points to an active ulcer crater of the lesser curvature of the cap.

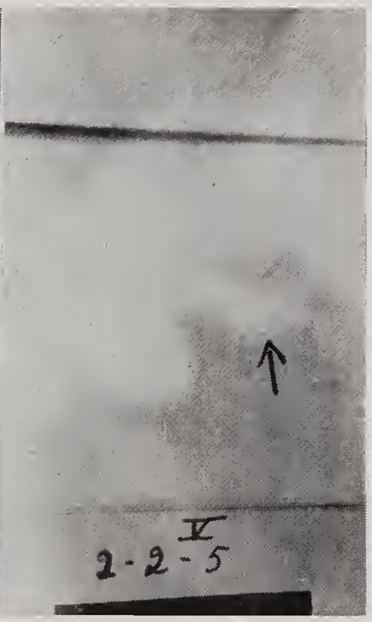


Fig. 5. Twenty-nine year old white male. This film demonstrates well a penetrating ulcer, probably eroding into the head of the pancreas. This patient had severe night pain with radiation into the back. Arrow indicates penetrating ulcer.

As a group there was very satisfactory improvement, with relief of subjective symptoms, and x-ray evidence of healing in practically all instances except the two with neuropsychiatric disability previously mentioned. Relief of subjective symptoms occurred, usually, in two to seven days. X-ray evidence of healing was usually noted in two to six weeks. Both of these factors depended considerably on the amount of patient cooperation received.

All patients were acquainted with the idiom "once an ulcer former always an ulcer former," and the importance of some form of permanent regime was impressed on them.

SUMMARY

This paper brings out interesting facts relative to the incidence of peptic ulcer in the younger age group. It substantiates without question the statement of leading gastroenterologists, that peptic ulcer is underdiagnosed, not over-diagnosed. A series of fifty young college men have been presented, all of whom have had symptoms of altered gastrointestinal physiology. The objective findings, rarely the subjective complaints, satisfied the criteria to establish a diagnosis of peptic ulcer. Representative cases with x-ray films have been demonstrated. Some of the problems in dealing with this age group have been discussed. After following these patients one can not help but take an optomistic attitude toward the peptic ulcer-problem, if diagnosed early and treated adequately. The psychological aspect of peptic ulcer, which is of utmost importance to the patient, has not been discussed in this paper. It is obvious that the proper handling of the psyche of the ulcer patient, is just as important to favorable prognosis as is proper diet, etc. The number of cases of peptic ulcer that originate in this age group, but are not diagnosed until the third or fourth decade of life, is open to conjecture. Certainly this series indicates that peptic ulcer in this age group is just as prone to complications as peptic ulcer in later life. It might be well to point out, as we are all aware, that many cases of vague indigestion are diagnosed peptic ulcer without the benefit of complete study, including gastrointestinal fluoroscopy and films interpreted by a competent radiologist.

CONCLUSION

For both economic and humanitarian reasons peptic ulcer is a real challenge to the medical profession (Bockus(1)). Since a diagnosis of ulcer carries such importance from an insurance, economic, military, and future health point of view, it should be made only after thorough, adequate study with all available tools. It appears that peptic ulcer is no respecter of age from the cradle to the grave, and on the basis of this study, any individual (male) who has even vague gastrointestinal complaints should have the benefit of a medical survey including gastrointestinal x-rays.

ADDENDUM

Since the preparation of the original series seven additional cases have been added. All were white males, the average age being 27 years, and all had duodenal ulcer. One patient, age 21 years, gave the history of a perforated duodenal ulcer operated August, 1951. Another patient, age 28 years, gave the history of exsanguinating gastrointestinal hemorrhage during the fall of 1952, and was treated with multiple transfusions. The other five had atypical symptoms but typical duodenal deformity on x-ray study. All are doing well, to date, on routine medical management.

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DESCRIBES NEW TYPE OF SURGICAL NEEDLE

A new type of surgical needle, for use in suturing incisions of the mitral valve of the heart, was described in the current (January 10) Journal of the American Medical Association by Dr. Gerald H. Pratt, New York.

A ski-shaped type of needle, the new addition to the physician's armamentarium was made with the base of the ski as a long square, instead of a flat surface, as is the case in most surgical needles. This change, Dr. Pratt stated, permits the needle to be held securely at any angle and makes suturing of the heart valve less hazardous.

"The use of such a needle for other deep suturing is also feasible," he added. "Other parts of the heart, the deep lying vessels in the chest or abdomen, the bronchi, the pelvic bowel and the bladder at times all present suture problems in which a needle proves valuable."

Dr. Pratt is associated with the vascular clinic of St. Vincent's Hospital and the New York University College of Medicine.

AMERICAN MEDICAL SPECIALTY BOARDS CERTIFY 84 MORE ARMY MEDICAL OFFICERS

American Medical Specialty Boards have recently certified 84 more Army medical officers and two, previously certified, were given additional subspecialty certification, Major General George E. Armstrong, the Army Surgeon General, announced today.

This brought the number of board-certified Army medical officers on active duty as of December 31, 1952, to 640 as compared with 500 for the previous year. In 1945 there were only 75 medical board certified specialists on Army duty.

General Armstrong attributes the increase to the Army Medical Services Graduate Professional Program inaugurated in 1947, and to the recall to active duty since the outbreak of the Korean conflict of Reserve medical officers, of whom some were board certified. Highly gratified with the ever increasing number of Army medical officers qualifying for specialty certification, General Armstrong said, "it is all part of the plan to provide the best possible medical care to our Army."

Skin Manifestations of Intrinsic Allergies*

L. J. OWEN, M.D.
Lincoln, Nebraska

Doctor Owen briefly classifies allergic diseases that have skin manifestations, according to source of allergen and the route by which it reaches the skin. He chooses to discuss those in which the allergen arises intrinsically, chiefly from foci of chronic infection. The author dwells at some length upon the use of trichophyton extracts in diagnosis and treatment of the mycid and of autogenous vaccines in the bacterid. He stresses desensitization as contrasted with immunization.

EDITOR

A differential grouping of allergic disease with skin manifestations may be made on the basis of the allergens involved. The contact dermatoses are those with a purely external source of allergen, occupational or otherwise. The inhalation allergies are also essentially contact, though systemic involvement may result. The cases in which there is systemic involvement, with circulatory distribution of the allergen to the skin, include those resulting from injestion of foods and drugs, or the parenteral injection of drugs. The others included in this type are those in which the allergen is systemically intrinsic, —usually foci of infection; bacterial, mycotic, virus, or animal parasite. It is with this type we are concerned in this discussion.

The differential diagnosis of this type is important in therapeutics, but by no means always easy. The asymmetry in distribution and sharp localization of the dermatitis often indicative of the contact disease are not infrequent in intrinsic dermatitis, and elements of contact skin irritation are common in the skin reacting to a systemic allergy.

The diagnosis of intrinsic allergy is based first upon history. The duration, remissions, recurrences, non-seasonal character, non-dietary influence, and non-occupational or contact factors are of more importance than the actual clinical findings. The latter may vary from lichenified plaques to a severe extensive eczematous condition, usually with a tendency to symmetrical distribution. The laboratory findings, while frequently important, may also show little, even in the presence of a sharply active allergic turmoil. I have seen quite severely ill patients who had essentially normal white, and differential counts, no eopinophilia, no increase in sedimentation rate, and a normal urine.

The cases of intrinsic allergy are the ones in which the skin tests with foods and contact substances prove quite useless, and frequently misleading. I have seen many patients with long lists of food allergens which had been compiled on the basis of false positive reactions. A type of skin test that is of great help in intrinsic allergies, is the intradermal injection of the allergen if it can be obtained from the suspected focus by culture. The elimination of the focus, with reasonably prompt clearing of the skin is, of course, the most satisfactory proof.

The most common of the intrinsic skin allergies is the mycid. In the development of knowledge of mycotic infections we went through the period when that diagnosis was almost automatically made of all vesicular rashes of the hands. This was, of course, far from correct. In the early years of the availability of the Trichophyton extracts, these were used as treatment on all types of fungus infection but without sufficient value for such wide usage. They were mistakenly discarded by many physicians. Some patients react to the injection in a manner parallel to the tuberculin test, and the positive tests have a similar significance. There is a marked group-sensitive reaction to the true fungi, but the Fungi imperfecti or yeasts produce their own reaction. Since the trial and error period of using Trichophyton extracts, I have employed them to test fungus infection cases only where there was clinical suspicion of possible mycid reaction.

Such skin tests were made in 660 of about 1,700 cases of fungus infection. Both trichophytin and oidiomycin were positive, in 150; trichophytin positive, and oidiomycin negative in 137; oidiomycin-positive and trichophytin-negative, in 119; both tests negative, in 265. Granting that the test might have been positive in some of those not tested, we have evidence of allergic reaction in 395 or 23 per cent. Clinical use of the extracts has been made as desensitization agents, only for these patients, and, good results in more than 50 per cent of patients makes it a valuable treatment in selected cases; in fact, the treatment of choice in about 12 per cent of mycotic infections. The youngest patient in this group was 9 years old, the oldest 72 years old. Only a few of these patients were more than 50 years of age, and 75 per cent under 40 years.

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*Read before the 8th Pan-American Medical Association Cruise Congress, January, 1953.

By decades:

1-19 years	38
20-29 years	153
29-39 years	105
39-49 years	60
49-59 years	34
59-69 years	4
72	1

The next group I wish to consider is made up of those presenting bacterids, rash resulting from pyogenic infections of the skin, such as pyoderma, sycosis vulgarus, impetigo, and pyogenic folliculitis. These patients present a difficult problem in that toxic absorption produces variable degrees of dermatitis, frequently vesicular, and all out of proportion to evident infection; and many times the patient will spread a subsiding infection to new itching areas and start a fresh cycle of lesions. In this group autogenous vaccines may be helpful, but their use must be strictly by a desensitizing technique and dosage, or one may incite the sudden spread of severe dermatitis. The antibiotics are only palliative in the deep seated follicle infections, and complete dependence on them may result in repeated exacerbations of the infections and dermatitis.

I have listed 65 such cases or 2.2 per cent of 2,500 cases of pyogenic dermatoses, and I think those cases have probably caused more trouble than the other 2,400. The age groups of these patients are as follows: Youngest 1 year old and oldest 65 years. Fifty of the 65 were under 40 years old.

Groups by decades:

1- 9 years	2
10-19 years	2
20-29 years	18
30-39 years	28
40-49 years	5
50-59 years	6
60-65 years	4

A source of bacterid dermatoses too often missed is dental infection. The number of cases in which I have definite evidence of this relationship is much too small, because most of them are on records made in comparatively recent years. In the treatment of these the dental surgeon comes into the picture. The radical sacrifice of sound teeth is, of course, to be avoided, but do not let him be too conservative, either. The hoped for result in some of these cases may be discouragingly slow. In other instances the removal of one infected tooth may produce an almost dramatic clearing of severe and distressing dermatitis of many months standing. The ages of this group ranged from 22 to 83 years. All but four, over 40 years of age.

By decades:

20-29 years	2
30-39 years	2
40-49 years	7
50-59 years	15
60-69 years	14
70-80 years	5
80-83 years	2

CASE REPORT

December 24, 1947—Mrs. J. L., age 67 years. This patient had a severe, extensive, erythematous and vesicular dermatitis, one year duration, involving face, chest and arms. This was the fourth attack over several years, with incomplete remissions. Blood and urine examinations essentially negative. X-ray disclosed a large molar root in a left maxillary abscess. There was a ten year history of discomfort under upper dental plate. December 27, 1947—Surgical cleanup of bone, followed by rapid clearing of skin. January 31, 1950—No recurrence of eczema.

February 19, 1951—Mrs. E. H., age 44 years. Contact dermatitis hands and legs. Apparently good response to local therapy. December 6, 1951—Recurrence of dermatitis involving axillae, upper trunk. No response to treatment or food eliminations. January 18, 1952—B/P—130/80; RBC—4,600,000; WBC—8,000; Differential—Normal; Urinalysis—Negative. Dental x-ray disclosed extensive infection; complete extraction done, in stages. Marked flares of rash and itching after each operation. February 16, 1952—Skin clearing rapidly. February 2, 1952—Flare-up of rash, and abscess in upper jaw. With incision and drainage of abscess, subsidance of both. July 29, 1952—Severe flare-up of dermatitis face, legs and trunk. Abscess of incisor area of upper jaw drained. October 10, 1952—Gradual improvement of skin in last 2 months, now best condition in past years.

There were six cases of prompt control of dermatitis with the control of renal infection and pyuria. In three instances there was a coincidental recurrence of the dermatitis with recurrent flare-up of pyuria and renal symptoms. The ages of these patients were 3-6-23-64-71-76 years.

I have recorded four instances of gall bladder disease in which dermatoses of several years duration cleared rapidly after removal of the infected gall bladder. The ages of these patients were, respectively, 60-66-69-71 years.

There were four patients in whom chronic bronchitis was the source of the allergen. In all these cases autogenous vaccines were used, after skin tests indicated sensitivity to the vaccine. In two instances very marked sensitivity was shown. The ages were 28-54-59-82 years.

The 82-year-old man had repeated attacks of extensive eczema over a period of five years, and for two years had severe asthma, which interferred with sleep. Autogenous vaccine used in this case contained a streptococcus, and an Oidiomycetes organism. Skin reaction positive to both organisms. The patient was first seen September 25, 1941. The last vaccine injection given April 22, 1942. Patient discharged free of all symptoms both skin and respiratory, and seen three years later with no recurrence.

I have records of three patients who had infection of varicose ulcers of legs, and eczematoid rash involving arms and parts of body. Control of the infection in stasis areas of legs, brought prompt relief of distant rash. Ages of patients 44-60-66 years.

There were two cases in which chronic, recurrently discharging otitis media was discovered by the internist in the search for infection. Culture, skin test and use of vaccine as a desensitizing agent brought about a healing of the condition.

CASE REPORT

Mrs. A.C., age 50 years. Severe scattered dermititis, arms, legs, duration two years with flares and no complete remission. No results from food, drug or contact allergy studies. Referred to internist for general study. Only abnormal finding was a nine per cent eosiniphilia in differential count, and slight discharge from a chronic otitis media. Culture made. Antogenous vaccine treatment produced excellent results.

Inflammatory reaction of the eyelids, chronic conjunctivitis and stubborn corneal ulcers have been part of the clinical picture with some of the dental infections. When these heal promptly, as some do, along with the skin, their connection with the intrinsic allergy is certain.

When an autogenous vaccine can be developed from the intrinsic allergen, we then have the situation in which this type of vaccine therapy is going to be most useful. Otherwise, the autogenous will probably give no better result than stock vaccine. In the treatment of skin allergies and skin infections in general, one finds many patients who have intrinsic allergy along with contact sensitivities, drug rashes and food allergies. In patients with dermatitis of proven food origin, an intrinsic element may be present or suspected. Such borderline and mixed cases have been largely excluded in the above discussion, and I have tried to present conditions in which recognition and therapy directed specifically toward the intrinsic source was necessary in order to obtain good results.

Tuberculosis Abstracts

APPRAISAL OF PROTECTIVE VALUE OF BCG VACCINE

The logical approach to the development and evaluation of a specific immunizing agent against tuberculosis requires not only an understanding of the fundamentals of immunity but an appreciation of the factors that make such an evaluation difficult. Such factors include variations in the biology of the tubercle bacillus, the susceptibility of the host, the pathogenesis of the disease, the degree of exposure, social and economic factors, and an almost universal decline in the morbidity and mortality from tuberculosis.

At the present time there is almost general acceptance that some degree of increased resistance follows a primary infection. The immunity in tuberculosis is not as complete as the immunity following such a bacterial disease as typhoid or the immunity following certain virus infections and tends to decrease with the disappearance of viable tubercle bacilli.

The impracticability of using viable virulent tubercle bacilli in man to induce resistance and the inconclusive results following the use of nonviable tubercle bacilli has led to widespread investigations of the value of viable, attenuated cultures of tubercle bacilli as immunizing agents. One of the most widely used of such cultures has been the BCG culture of Calmette and Guerin.

The BCG culture originated from a virulent, bovine type tubercle bacillus isolated in 1902. This culture was attenuated by long-continued transplantation on potatoes impregnated with beef bile and glycerine. This attenuated strain has retained the cultural, tinctorial, antigenic, and tuberculogenic properties of the original culture, but has lost the ability to produce progressive tuberculosis in animals as susceptible as the guinea pig or in man.

BCG vaccine was first used in France in 1921. Since then approximately 50 million persons of various ages living in different parts of the world, some under the most adverse and primitive conditions, have received the vaccine. The diversity of opinion regarding its value has been due, in great part, to the lack of adequately controlled investigations and to the difficulty of dissociating the protective role of BCG vaccine from an almost universal decrease in the morbidity and mortality from tuberculosis, antedating the use of BCG vaccine.

In order to appraise as objectively as possible the specific value of BCG vaccine in control of tuberculosis, a joint investigation was undertaken by the Henry Phipps Institute, University of Pennsylvania, and the Branch of Health, Bureau of Indian Affairs, Department of the Interior. This study was initiated in December, 1935, and it was not until February, 1938, that all of the injections of BCG vaccine and saline solution were completed in the different areas.

This investigation was conducted in five different geographical areas and included eight different tribes. These agencies and communities are widely scattered, and the inhabitants live under greatly differing climatic conditions. They vary in their dietary habits and represent different social and cultural patterns. In general, their economic con-

(Continued on page 232)

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THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

INCOME TAX DEDUCTIONS FOR POSTGRADUATE EDUCATION

The June, 1952, issue of The Journal contained an article in the Organization Section relative to the American Medical Association's efforts to secure a reversal of a 30-year old rule prohibiting physicians from making income tax deductions for expenses involved in attending formal postgraduate courses. This item revealed that the A.M.A. had filed a brief in a federal tax court case involving the right of an attorney by the name of Coughlin to deduct expenses incurred by him while taking postgraduate courses on taxation.

Mr. J. W. Holloway, Jr., director of the A.M.A. Bureau of Legal Medicine, has said many times that it is difficult to understand the validity of the ruling that postgraduate expenses cannot be deducted. He points out its consistency by noting that physicians are permitted to deduct the costs of attending medical meetings, of subscriptions to scientific publications, and of dues paid to medical organizations, all of which are intended to keep physicians' "stock in trade" up-to-date.

Mr. Holloway has contended that if these kinds of expenses are allowable, it is difficult to find the logical or legal distinction between them and the costs of attending a formal course offered to keep the physician abreast of procedures that are essential to him in the finest possible treatment of his patients. In view of this situation, the A.M.A. retained a special tax counsel to pursue this matter to a conclusion.

Just recently a very encouraging decision was handed down by the U.S. Court of Appeals, Second Circuit. After the Federal Tax Court found against the attorney, Coughlin, the case was appealed to the Appellate Court, which on April 14, reversed the decision of the Tax Court. The Appellate Court held, in part, that the expenses incurred by Coughlin were deductible because "a lawyer has a moral and professional duty to keep sharp the tools he uses in his practice."

This decision is parallel to the position taken by the A.M.A. regarding physician postgraduate course expenses. As a result, the Bureau of Legal Medicine has conferred with its tax counsel. An explanatory story of the doctor implications in the Coughlin case will be sent to you when all facts are known.

WORLD MEDICAL ASSOCIATION

The World Medical Association is comparatively new, hence, its purposes and aims are vague in the minds of many physicians. This has led to the often repeated question: "Why should the average doctor have any interest in the WMA?" Dr. Louis H. Bauer, Retiring President of the A.M.A. and Secretary-General of the World Medical Association, gives a good answer to this question in his "President's Page" in the April 25 issue of The JAMA. Here, in part, is Doctor Bauer's answer:

". . . an increasing number of problems relating to health and medicine are being discussed and decided on an international level. Most of the bodies discussing these problems have one viewpoint only, and that is the viewpoint of government. Without the World Medical Association, there is no one to present the opinions of practicing physicians. Their views should be heard and considered, but they cannot give them as individuals. Their voice can be heard only through an organization. The World Medical Association, through its 43 member associations, can speak for 700,000 physicians. I believe all will agree that this is a voice that should not be ignored. Furthermore, what happens in other countries is sooner or later likely to affect us here. Therefore, we should work with our colleagues in other countries and attempt to solve the problems facing the profession.

"Six years of experience with doctors of other nations has shown me conclusively that the same problems face the profession in all countries. They differ only in degree. That, perhaps, is not surprising. What is surprising is that doctors all over the world think alike about these problems, differing only as to details."

Please write your headquarters office for information regarding membership in the World Medical Association. For more complete details on WMA, kindly read Doctor Bauer's April 25th "President's Page."

Streptomycin and PAS are not bacteriocidal but bacteriostatic. They do not cure or eradicate the disease. Relapses occur and reconversion of sputum from negative to positive is frequent. They have markedly improved the prognosis of tuberculosis but have not controlled it. (John H. Skavlem, M.D., The W. Va., Med. J., December, 1952).

News and Views

From The Howells Journal:

The state can expect to build another 1,800 bed hospital like the Hastings State Mental Hospital or appropriate enough money for "intensive treatment" at the present hospitals, Dr. Lee Sandritter, Ingleside, told the legislature's Budget Committee recently.

Doctor Sandritter told the legislators that Nebraska could save both tax dollars and human beings by investing more now in the treatment of mental illness. He said a substitute for the big building program would be "intensive treatment of patients—getting them out in 60, 90, 120 days." He estimated that a 1,800-bed hospital would cost $25,000,00, or about $13,900 per bed.

Editorial from The Fairbury News:

"The American Press Magazine recently polled a large number of small town newspaper editors on their views concerning various problems and issues which are now in the public eye. One question dealt with federal health insurance. The editors' stand on this was one of nearly unanimous opposition: 92 per cent were against it and only 5 per cent were for it, while one per cent were undecided and 2 per cent did not comment.

"An Oregon editor pretty well summed up the views of the majority when he said, "certainly socialized medicine should be forgotten as should other totalitarian proposals." So did a Nebraska editor who observed, "keep the government out of medicine." Many of the editors strongly endorsed the voluntary health insurance idea which has made spectacular progress in this country in late years.

"This does not mean these editors think that the medical care situation is perfect and that nothing remains to be done. The average editor, and especially the small town editor, is vitally interested in improving and extending medical care as swiftly as possible. But he knows that constant and gratifying progress is being made by free medicine and by voluntary, individual and community action. And he knows too that nothing could be more destructive than to put the government in the saddle and set the stage for socialized medicine.

"It is unlikely that the present administration will dabble with the subject as far as government is concerned since the leaders in government have already shown that they intend to take the government out of private affairs."

Washington, D.C. — A permanent injunction to stop further shipments of Dunkler's cancer diagnosis kit has been ordered by Federal Judge Philip L. Sullivan in Chicago, according to a report issued by the Food and Drug Administration of the Federal Security Agency. The Chicago manufacturer did not contest the court order.

The banned kit consisted of a test tube, a dish and two bottles of well-known chemicals. Directions were included which told the user to add the chemicals to a sample of the patient's urine and in an hour evaporate a medicine dropperful, noting whether or not a color change had occured.

Dr. Gordon Granger, FDA medical officer, said the government's charges that the kit is worthles were confirmed by tests made by the M. D. Anderson Hospital, Houston. Tests were made on more than 100 known cancer patients and healthy medical students. Negative and positive results were obtained in both groups, and when the same individuals were retested, different results were obtained.

New York, N.Y. — Life insurance companies are being urged to branch out into the medical, health and accident business by Charles J. Zimmerman, Hartford, Conn., managing director of the Life Insurance Agency Management Association.

In addressing a recent national convention of the Life Insurance Association of America, Mr. Zimmerman said that "disability insurance is a fundamental form of personal insurance," adding that life companies have a major responsibility to provide it.

"Failure to provide coverage for accident and sickness, hospital, surgical and medical expense, and the catastrophic illness field, not only invites others to fill the gap, but creates public demand that others do so," Zimmerman said. He asserted that life insurance sales in recent years have not kept pace with population growth or the increase in income.

Chicago — A major goal in the medical care program for the United States has been reached with the establishment of mediation committees in each of the 48 states, the District of Columbia and Hawaii, according to a statement issued by the Council on Medical Service of the American Medical Association.

The establishment of these committees is the result of a four year campaign for the creation of such patient-physicians relations bodies. These committees investigate complaints concerning the professional conduct and ethical deportment of individual physicians. After hearing both sides of the case, the committees attempt to bring about an amicable adjustment.

The council also reported that voluntary health coverage continues to gain in both quality and quantity. It was estimated that by 1953 approximately 90,000,000 persons will be covered by some form of protection against the costs of illness, accident and hospitalization.

From a wire service:

A contract between the West Nebraska Methodist Hospital (Scottsbluff) and Scotts Bluff County has been approved by the hospital board and the county commissioners. The contract calls for payment to the hospital for care given to indigent persons.

County Attorney H. J. Holtorf explained that the contract is more of a "guarantee that the hospital will be reimbursed for the money it expends in caring for relief patients." In the past claims submitted by the hospital have been honored, Holtorf said, but the contract will clarify the situation.

More than $39,000 has been raised by public subscription throughout western Nebraska to aid the hospital in its shaky financial condition. The fund's goal is $60,000.

The U. S. Postoffice Department is considering issuance of a series of postage stamps honoring American medical leaders. The proposed new stamps would supplement the Famous American series of stamps issued in 1940. In that series, there was no special group for physicians, but two medical men were included in the Scientists set.

At the request of postal authorities, Brig. Gen. Elbert DeCoursey, Director of the Armed Forces Institute of Pathology, has submitted a list of medical men who might be pictured on the proposed new stamps. There is no assurance from official sources the proposed stamps will be issued.

Beaver City, Neb., April 16—Residents of this community are looking for a doctor. In about two weeks they will be ready to set him up in handsome style. Nearing completion—tile floors still to be laid—is a ten-room brick and tile clinic.

The $35,000 structure was built from contributions by residents of Beaver City and its trade territory—totalling about 3,500 persons. An unsuccessful attempt to persuade a doctor to locate here lit the spark. The Beaver Valley Clinic Association was formed and fund raising began about a year ago.

Auctions, home talent plays, house-to-house canvasses and other money-raising plans were used. The clinic has a waiting room, registration office, two examination rooms, a two-bed ward, emergency and treatment room, x-ray room, nurse's room and laboratory. The clinic association hopes to equip some of the rooms through memorials and donations.

PUBLIC RELATIONS

Analyses of the information obtained by the American Medical Association through the survey conducted by its Department of Public Relations reveal a number of very interesting items. The most obvious revelation is probably the widespread interest revealed throughout the medical profession, in this important activity. In the first place, seven hundred replies from state and county societies were received. This, alone, signifies unusual interest on the part of the doctors.

It is impossible to quote, or even to properly summarize, these replies in the space at our disposal, but the following quotation from PR Doctor for May will serve to emphasize the points indicate above:

"Evidence that physicians have made real strides toward some of PR goals . . . is given in these figures, based on 700 survey replies:

	County Average	State
Night and emergency call systems	83%	74%
Mediation committees	71%	100%
Active community participation	91%	83%
Development of press, radio, TV relations	77%	91%

"An average of 79% of all county societies and 81% of state societies took part in detection drives and allied health campaigns; nearly 70% of county and state societies report they participated in other civic projects of all types. For example, 64% of all societies carried on school health programs, 34% of all counties and 25% of the states conducted rural health programs, and 85% lent a hand to civil defense activities."

NEW OFFICERS OF THE NEBRASKA STATE MEDICAL ASSOCIATION

At the meeting of the House of Delegates of the Association, held at 8:00 o'clock a.m., on May 14th, 1953, the following officers were elected by unanimous vote of those present:

Earl F. Leininger, McCook, President-Elect
Wm. M. McGrath, Grand Island, Vice President
James D. Bradley, Omaha, Speaker of the House of Delegates
Fritz Teal, Jr., Lincoln, Vice Speaker of the House
B. R. Bancroft, Kearney, Councilor, Ninth Councillor District
F. M. Karrer, McCook, Councillor, Tenth Councillor District
C. F. Heider, North Platte, Councillor, Eleventh District
Frank Herhahn, Scottsbluff, Councillor, Twelfth District
Karl S. J. Hohlen, Lincoln, Delegate to American Medical Association
Earl F. Leininger, Alternate Delegate to A.M.A.
F. L. Rogers, Lincoln, Delegate to North Central Conference
A. A. Ashby, Geneva, Board of Trustees (replacing Dr. Earle Johnson, retired)
J. E. M. Thomson, Lincoln, Board of Trustees
R. B. Adams, Lincoln, Medicolegal Advice Committee

The following were nominated for membership on the board of directors of Nebraska Medical Service (designated as Committee on Prepayment Medical Care):

Howard Hunt, Omaha
John Courtney, Omaha
Glen E. Peters, Randolph
Edmond Walsh, Omaha

The following quotation from Secretary's Letter of April 30 is encouraging to those who still believe in the free enterprise system:

> PRESIDENT BACKS MEDICAL EDUCATION DRIVE
>
> The financial crisis facing medical schools is "a dangerous threat to the national welfare, which must be met," President Eisenhower said recently in opening the $10,000,000 campaign within industry and the medical profession to help the schools overcome deficits threatening their teaching and research programs.
>
> The President's views were expressed in a long letter to S. Sloan Colt, New York banker and president of the National Fund for Medical Education.
>
> "As I wrote to you on January 6, the financial problems of the medical schools should be solved through private, rather than governmental means. Excessive reliance on government violates the essential principle of our free enterprise system. It falls, then, upon American business to assume a greater share of the responsibility for maintaining the institutions essential to our national health."

FIFTY-YEAR PIN AWARD

For the fourth consecutive year a group of Nebraska doctors was awarded pins in honor of fifty years of medical service. The awards were made, as usual, as part of the ceremonies accompanying the annual banquet of the Nebraska State Medical Association. The recipients of the award were: S. G. Allen, M.D., Stanton; W. R. Boyer, M.D., Pawnee City; M. M. Sullivan, M.D., Spalding; J. S. Welch, M.D., Lincoln, and C. A. Rydberg, M.D., Litchfield.

Announcements

1953 ANNUAL ASSEMBLY OF THE OMAHA MID-WEST CLINICAL SOCIETY

The Omaha Mid-West Clinical Society is progressing most satisfactorily with plans for the 1953 Annual Assembly, which will be held at Hotel Paxton, Omaha, Nebraska, October 26th to 29th, inclusive.

The scientific program is rapidly taking shape. The mezzanine floor of the hotel will be taxed to capacity with scientific and technical exhibits. The usual motion picture program, panel discussions, lectures by members and question and answer periods following luncheons and dinners will be continued as in previous years.

Following is a partial list of nationally recognized specialists who will discuss timely subjects in their respective fields:

RUSSEL J. BLATTNER, M.D., Houston, Texas, Professor of Pediatrics, Baylor University College of Medicine.

FRANCIS J. BRACELAND, M.D., Hartford, Connecticut, Psychiatrist-in-Chief, Institute of Living, Hartford Retreat Clinical Professor of Psychiatry, Yale University School of Medicine, Consultant Psychiatrist to Surgeon General, U.S.N.

JOHN H. GIBBON, JR., M.D., Philadelphia, Pennsylvania, Professor of Surgery and Director of Surgical Research, Jefferson Medical College of Philadelphia.

GRACE A. GOLDSMITH, M.D., New Orleans, Louisiana, Professor of Medicine and Director of Nutrition and Metabolic Clinic, Tulane University of Louisiana School of Medicine, Editorial Board, Journal of Clinical Nutrition.

WILLIAM S. HOFFMAN, M.D., Chicago, Illinois, Professorial Lecturer in Physiology, University of Illinois College of Medicine.

MICHAEL J. HOGAN, M.D., San Francisco, California, Clinical Professor of Ophthalmology, and Director of the Francis I. Proctor Foundation, University of California Medical School.

LEWIS M. HURXTHAL, M.D., Boston, Massachusetts, Chairman of the Department of Internal Medicine, Lahey Clinic.

OSWALD S. LOWSLEY, M.D., New York, New York, Director of Oswald Swinney Lowsley Foundation.

JAMES V. LUCK, M.D., Los Angeles, California, Assistant Professor of Orthopedic Surgery, University of Southern California School of Medicine.

THEODORE B. RASMUSSEN, M.D., Chicago, Illinois, Professor of Neurological Surgery, University of Chicago School of Medicine.

FRANK R. SMITH, M.D., New York, New York, Assistant Professor of Clinical Obstetrics and Gynecology, Cornell University Medical College.

The Society is confident that those who register for the sessions this year will have a highly profitable four days in that they will be briefed on many of the problems in medicine as of today.

REMEMBER THE DATES — OCTOBER 26th to 29th, INCLUSIVE — and PLAN TO ATTEND.

SCHOLARSHIP IN SURGICAL RESEARCH

The American College of Surgeons announces that its Board of Regents has established "the first of several contemplated scholarships in the field of research for promising young men seeking a career in academic surgery, and who have recently finished or who are in the final months of their residency training program." Those who are interested may direct their inquiries for further information to Research Scholarship Committee, American College of Surgeons, 40 East Erie Street, Chicago, Illinois.

Coming Medical Events

ANNUAL SESSION, AMERICAN MEDICAL ASSOCIATION, June 1-5, 1953, New York City, N.Y. George F. Lull, M.D., Secretary, 535 North Dearborn, Chicago 10.

ANNUAL MEETING, NEBRASKA TRUDEAU SOCIETY, Omaha, June 18, 1953. William Nutzman, M.D., Kearney.

IN-RESIDENCE POSTGRADUATE STUDY, Univeristy of Nebraska College of Medicine, Omaha. Daily instruction until June 20, 1953. Alumni Secretary or Public Relations Office at the College of Medicine, 42nd and Dewey Streets, Omaha.

ROCKY MOUNTAIN CANCER CONFERENCE, July 8 and 9, 1953, Denver, Colorado. Mr. Harvey Sethman, 835 Republic Building, Denver 2.

POSTGRADUATE COURSE IN ENDOCRINOLOGY, September 22, 23 and 24, 1953, University of Nebraska College of Medicine, Omaha. Elton Newman, M.D., University of Nebraska College of Medicine, 42nd and Dewey Avenue, Omaha.

ANNUAL ASSEMBLY, OMAHA MID-WEST CLINICAL SOCIETY, October 26-30, 1953, Paxton Hotel, Omaha. Miss Irene Rau, 1036 Medical Arts Building, Omaha.

CRIPPLED CHILDREN'S CLINICS—

June 6, Lexington, High School

June 20, Scottsbluff, St. Mary's Hospital

July 11, Norfolk, State Hospital

July 25, McCook, St. Catherine Hospital
August 8, North Platte, Knights of Columbus Bldg.
August 15, Chadron, Elks Club.
August 29, Hastings, Mary Lanning Hospital.
September 12, Broken Bow, High School
September 26, Kearney, Good Samaritan Hospital

NEBRASKA STATE RADIOLOGICAL SOCIETY—
October 21, Veterans Hospital, Lincoln.

News from Our Medical Schools

POLIOMYELITIS REHABILITATING CENTER

The National Foundation for Infantile Paralysis last month issued grants in the amount of $23,250.00 to The Creighton University School of Medicine, and $8,333.34 to Creighton Memorial St. Joseph's Hospital, for the establishment of a Polio Rehabilitation Center, with particular emphasis upon the problems of chronic respirator-patients. The funds will be employed to secure auxiliary personnel and equipment for the rehabilitation center. It is hoped thereby to establish team activities in the field of rehabilitation, which is so vital to the proper functioning of such a unit.

Creighton Memorial St. Joseph's Hospital has set aside the ground floor of its unit for this program. The medical care of the patients admitted to the unit will be under the direction of a committee on rehabilitation composed of Dr. Harold N. Neu, chairman, Dr. J. Harry Murphy, Dr. Frank R. Barta, Dr. James W. Martin, and Dr. Thomas D. Smith.

The purpose of the unit is not custodial care but an attempt at actual rehabilitation, because it is felt that the responsibility for custodial care of the patients who cannot be rehabilitated rests upon the community and state agencies, just as does the responsibility for the patient with tuberculosis or with severe mental illness. The operation of a unit such as this should also provide opportunity for further development of the techniques of rehabilitation. It has been found in other respirator-centers in the United States that the chronic respirator-patient frequently can be weaned, even though he has been in the respirator for a long period of time. It is recognized, however, that best results are obtained by using the chest respirator, and the rocking bed at the earliest possible time.

This new center should also provide opportunity for investigation in the psychology of disability, particularly that associated with breathing difficulty. The challenge of chronic illness is a serious one for the medical profession, and the rehabilitation of a severely handicapped individual is of no less value to the community than the rehabilitation of a less severely handicapped person. To teach a helpless person self-care releases personnel and saves expensive care for the individual in some institution. If, furthermore, he can do some work, he can add to the potential wealth of the community. Although most chronic diseases involve the older segments of the population, surveys indicate that sixteen per cent of all persons with chronic diseases are under twenty-five years of age. Many of these young people may be capable of great achievements later in life, because of rehabilitation.

RECENT BOOKS AVAILABLE

You are reminded that books and other valuable services are available to you at the University of Nebraska, College of Medicine, Medical Library. The following lists of books show the recent acquisitions:

LIST NO. 17 — OCTOBER, 1952

Alexander, Franz: Dynamic Psychiatry. Chicago, U. of Chicago Press, 1952. (616.8 A12d).

Allen, A. C.: The Kidney—Medical and Surgical Diseases. New York, Grune & Stratton, 1951. (616.61 A14k).

Artz, N. L.: Biochemistry of Glucuronic Acid. New York, Academic Press, 1952. (612.0153 Ar7b).

Barclay, A. E.: Micro-arteriography, and Other Radio-logical Techniques Employed in Biological Research. Springfield, C. Thomas, 1951. (616.87 B23m).

Barta, F. R.: The Moral Theory of Behavior. Springfield, C. Thomas, 1952. (616.85 B28m).

Bentley, A. O.: Textbook of Pharmaceutical Chemistry. New York, Oxford, 5th ed., 1951. (615.4 B44t5).

Bland, J. H.: Clinical Use of Fluid and Electyolite. Phila., W. B. Saunders, 1952. (612.014 B61c).

Clark, W. M.: Topics in Physical Chemistry. Balt., Williams & Wilkins, 2nd ed., 1951. (541.3 C55t2).

Cuneo, H. M.: Brain Tumors of Childhood. Springfield, Thomas, 1952. (616.992 C91b).

Dieckmann, W. J.: The Toxemias of Pregnancy. St. Louis, Mosby, 2nd ed., 1952. (618.3 D56t2).

Dodson, A. I.: Urological Surgery. St. Louis, Mosby, 2nd ed., 1950. (617.46 D66u2).

Dunton, W. R.: Occupational Therapy. Springfield, Thomas, 1950. (615.851 D92o).

Eller, J. J. and Eller, W. D.: Tumors of the Skin. Phila., Lea & Febiger, 1952. (616.5 E15t2).

Francis, C. C.: The Human Pelvis. St. Louis, Mosby, 1952. (611.96 F85h).

Freeman, Walter and Watts, J. W.: Psychosurgery in the Treatment of Mental Disorders and Intractable Pain. Springfield, Thomas, 2nd ed., 1951. (617.51 F87p2).

Gesell, Arnold: Developmental Diagnosis—Clinical Methods and Pediatric Applications. New York, Hoeber, 2nd ed., 1947. (136.7 G33d2).

Greenhill, J. P.: Surgical Gynecology. (Handbook of Operative Surgery). New York, Yearbook, 1952. (618.1 G83s).

Gregory, W. K.: Evolution Emerging. New York, Macmillan. 2v., 1951. (575 G86e).

Gyorgy, Paul, ed.: Vitamin Methods. New York, Academic Press Inc., 2v, 1950-51. (612.0151 G99v).

Hampton, O. P.: Wounds of the Extremities in Military Surgery. St. Louis, Mosby, 1951. (617.99 H19w).

Hardy, J. D.: Surgery and the Endocrine System. Phila., Saunders, 1952. (617.9 H22s).

Howorth, M. D.: Textbook of Orthopedics. Phila., Saunders, 1952. (617.3 H83t).

Johnson, Julian & Kirby, C. K.: Surgery of the Chest. (Handbook of Operative Surgery). Chicago, Yearbook, 1952. (617.54 J62s).

LaCroix, Pierre: The Organization of Bones. Translated from the amended French ed., by Steward Gilder. Phila., Blakiston, 1951. (612.75 L12o).

Levinson, S. A. and McFate, P. P.: Clinical Laboratory Diagnosis. Phila., Lea & Febiger, 4th ed., 1951. (616.075 L57c4).

Lewin, Philip: The Knee and Related Structures. Phila., Lea & Febiger, 1952. (612.72 L59k).

Lichtenstein, Louis: Bone Tumors. St. Louis, Mosby, 1952. (616.992 L62b).

Lippman, R. W.: Urine and the Urinary Sediment. Springfield, Thomas, 1952. (616.076 L63u).

McGavack, T. H.: The Thyroid. St. Louis, Mosby, 1951. (616.44 M17t).

Moore, F. D.: Metabolic Response to Surgery. Springfield, Thomas, 1952. (617.9 M78m).

Morton, D. J.: Human Locomotion and Body Form. Baltimore, Williams & Wilkins, 1952. (612.76 M84h).

Moyer, C. A.: Fluid Balance. Chicago, Yearbook, 1952. (612.014 M87f).

Najjar, V. A.: Carbohydrate Metabolism. Baltimore, Johns Hopkins Press, 1951. (612.0153 N15c).

Nettleship, Anderson: Basic Principles of Cancer Practice. Baltimore, Williams & Wilkins, 1952. (616.994 N38b).

New York Academy of Medicine: The Musculoskeletal System. New York, Macmillan, 1952. (616.7 N42m).

Robinson, R. A.: The Vitamin B. Complex. New York, Wiley, 1951. (612.0151 R56v).

Schaub, E. G.: Diagnostic Bacteriology. St. Louis, Mosby, 4th ed., 1952. (616.01 Schld4).

Smith, C. A.: The Physiology of the Newborn Infant. Springfield, Thomas, 2nd ed., 1951. (618.6 Sm5p2).

Society for Experimental Biology. Symposia No. 5. Carbon Dioxide Fixation and Photo-Synthesis. New York, Academic Press, 1951. (612.2 Solc).

Talbot, N. B.: Functional Endocrinology, from Birth Through Adolescence. Cambridge, Mass., Harvard U. Press, 1952. (616.4 T14f).

Thorn, G. W.: The Diagnosis and Treatment of Adrenal Insufficency. Springfield, C. Thomas, 2nd ed., 1951. (612.45 T39d2).

LIST NO. 18 — MARCH, 1953

American Rheumatism Association: Rheumatic Diseases. Philadelphia, Saunders, 1952. (616.991 Am3r).

Block, R. J.; LeStrange, Raymond and Zweig, Gunther: Paper Chromatography. New York, Academic, 1952. (544.9 B26p).

Brand, Theoror von: Chemical Physiology of Endoparasitic Animals. New York, Academic, 1952. (593 B73c).

Caullery, Maurice: Parasitism and Symboiosis. London, Sidgwick & Jackson, 1952. (616.96 C31p).

Dawber, T. B. and Hawes, L. E.: Diseases of the Chest. Baltimore, Williams & Wilkins, 1952. (616.2 D32d).

Dieke, G. H. and Duncan, A. B. F.: Spectroscopic Properties of Uranium Compounds. (National Nuclear Energy Series Vol. 2, Division 3). New York, McGraw-Hill, 1949. (535.84 D56s).

Dubos, Rene, ed.: Bacterial and Mycotic Infections of Man. Philadelphia, Lippincott, 2nd ed., 1952. (616.01 D85b2).

Duncan, G. G.: Diseases of Metabolism. Philadelphia, Saunders, 3rd ed., 1952. (616.39 D91d3).

Forbus, Wiley: Reaction to Injury. Baltimore, Williams & Willkins, v. 2, 1952. (616.982 F74r).

Goldthwait, J. E., and Others: Essentials of Body Mechanics in Health and Disease. Philadelphia, Lippincott, 5th ed., 1952. (617.3 G58e5).

Gomori, George: Microscopic Histochemistry. Chicago, Uni. of Chicago Press, 1952. (578.8 G58m).

Guest, P. G.: Static Electricity in Hospital Operating Suites. Pittsburgh, U. S. Dept. of Interior Bureau of Mines, 1952. (617.9 Un3s).

Jensen, D. M.: History and Trends of Professional Nursing. St. Louis, Mosby, 2nd ed., 1950. (610.73 J45h2).

Lwoff, Andre, ed.: Biochemistry and Physiology of Protozoa. New York, Academic, 1951. (593.1 L98b).

Mainland, Donald: Elementary Medical Statistics. Philadelphia, Saunders, 1952. (614.1 M28e).

Mannheimer, E., ed.: Morbus Caeruleus. New York, Interscience, 1949. (616.15 M31m).

Mettler, F. A.: Psychosurgical Problems. Philadelphia, Blakiston. 1952. (6177.48 M56p).

Novak, Emil: Textbook of Gynecology. Baltimore, Williams & Wilkins, 4th ed., 1952. (618 N85t4).

O'Malley, C. D. and Saunders, J. B. de C. M.: Leonardo da Vinci on the Human Body. New York, Schuman, 1952. (611 qL551).

Palmer, E. D.: The Esophagus and Its Diseases. New York, Hoeber, 1952. (616.32 P18e).

Peplau, H. E.: Interpersonal Relations in Nursing. New York, Putnam, 1952. (610.73 P35i).

Petrie, Asenath: Personality and the Frontal Lobes. Philadelphia, Blakiston, 1952. (617.51 P45p).

Reynolds, S. R.: Physiological Bases of Gynecology and Obstetrics. Springfield, Thomas, 1952. (618 R33p).

Rivers, T. M., ed.: Viral and Rickettsial Infections of Man. Philadelphia, Lippincott, 2nd ed., 1952. (616.9 R52v2).

Rodden, C. J., ed.: Analytical Chemistry of the Manhattan Project. (National Nuclear Series, Vol. 8, Division 1). New York, McGraw-Hill, 1950. (543 6R61a).

Segal, M. S.: The Management of the Patient with Severe Bronchial Asthma. Springfield, Thomas, 1950. (616.23 Se4m).

Seymer, L. R.: A General History of Nursing. London, Faber & Faber, 2nd ed., 1949. (610.73 Se9g2).

Sloan, R. P.: This Hospital Business of Ours. New York, Putnam, 1952. (762.11 S17h).

Smillie, W. G.: Preventive Medicine and Public Health. New York, MacMillan, 2nd ed., 1952. (614 Sm4p2).

Snow, William: Roentgenology in Obstetrics and Gynecology. Springfield, Thomas, 1952. (618.2 Sn6r).

Somervell, T. H.: The Surgery of the Stomach and Duodenum. Baltimore, Williams & Wilkins, 1948. (617.55 So5s).

Sorsby, Arnold: Genetics in Ophthalmology. St. Louis, Mosby, 1951. (617.7 So7g).

Tannenbaum, Albert, ed.: Toxicology of Uranium (National Nuclear Energy Series, Vol. 23, Division 4). New York, McGraw-Hill, 1951. (615.9 T16t).

Truelsen, Frithof: Cancer of the Uterine Cervix. Copenhagen, Rosenkilde & Bagger, 1949. (616.994 T76c).

Von Oettingen, W. F.: Poisoning. New York, Hoeber, 1952. (615.9 V89p).

Welch, J. C.: Stomach and Duodenum. New York, Yearbook, 1851. (617.55 W44s).

White, J. C.; Smithwick, R. H. and Simeone, F. A.: The Autonomic Nervous System. New York, MacMillan, 3rd ed., 1952. (617.48 W58a3).

Youmans, W. B.: Basic Medical Physiology. Chicago, Yearbook, 1952. (612. Yo8b).

Ziegler, R. F.: Electrocardiographic Studies in Normal Infants and Children. Springfield, Thomas, 1951. (616.12 3i7e).

The Woman's Auxiliary

GREETINGS FROM THE NEW PRESIDENT

It is my privilege to speak to you, through our State Journal, as the new president of the Woman's Auxiliary. My earnest desire is to visit with you, from time to time, on common ground concerning mutual interests and accomplishments in the work of the Auxiliary. I am indebted to you, through your representatives, for election to this office. Your vote of confidence is invaluable, and, I pledge myself to take up the work where my predecessor lays it down and to advance it during my term of office.

I can do this effectively, only, if each officer, in her own capacity fulfills the duties of her office. Each, because of a special talent or willingness, has accepted her appointment; and, upon this body of officers rests the responsibility for guiding and encouraging each local auxiliary.

In all friendliness, may I emphasize that our Auxiliary strength in Nebraska is within the individual member. Rarely is there need to find a new outlet for this energy. Doctors' wives, for many generations, have given service to their communities in ways slightly less professional than their husbands, but no less important in furthering health education and social improvement.

Today, under a new name, in an effort to maintain the dignity and respect which is due our husbands' profession, we are giving this same service — some of us too reluctantly and many eagerly willing. Today, it is a "gesture toward improving public relations."

If achievement can be measured only by failure or success in reaching a goal, then let us set a goal of "improving the gesture toward good public relations."

Specifically, this is service. It is the burden of molding the right public attitude toward medical care in our local communities. It entails various services between our families, among our friends, and to our community-institutions.

This united effort, repeated in each community where there is an auxiliary, and spread over the length and breadth of Nebraska, would not only benefit the State but give us pride in accomplishment. If we haven't that, then we have forfeited our right to existence. Auxiliaries are formed with the consent of their medical societies and it follows that, as members, we should support the societies' activities, protect their reputations and ever sustain their high ideals.

Our Nebraska Auxiliary is a unit of the Woman's Auxiliary to the American Medical Association which has enjoyed thirty years of steady growth in membership and accomplishment. Nebraska, organized in 1925, has only attained thirty-third place in membership among the forty-eight states, the District of Columbia, and Hawaii. In relation to the medical society membership of approximately 1,280, we can report this year an auxiliary membership of 521.

I hope you agree that, in this, we are not doing credit to our Medical Society.

While I am pledging myself to represent you, please pledge yourselves to loyal membership and continued service to your community.

MRS. JAMES P. DONELAN.

The follow data concerning officers, committee chairmen, executive board, etc., for 1953-1954, are published at this time for the information of all who may be interested.

MEMBERS OF EXECUTIVE BOARD

President—Mrs. James Donelan, Omaha
President-Elect—Mrs. Isaiah Lukens, Tekamah
First Vice President—Mrs Lynn Sharrar, Lincoln
Second Vice President—Mrs. George Robertson, Omaha
Treasurer—Mrs. George Covey, Lincoln
Recording Secretary—Mrs. James J. O'Neil, Omaha
Corresponding Secretary—Mrs. Kenneth Muehlig, Omaha
Directors—
  Mrs. Ted Riddell, Scottsbluff
  Mrs. George DeMay, Grand Island
  Mrs. R. R. Brady, Ainsworth
  Mrs. Arthur Offerman, Omaha
Advisor—Mrs. R. E. Garlinghouse, Lincoln
Parliamentarian—Mrs. P. O. Marvel, Giltner
Historian—Mrs. W. W. Carveth, Lincoln

COMMITTEE CHAIRMEN

Finance—Mrs. Arthur Offerman, Omaha
Legislation—Mrs. W. C. Kenner, Nebraska City
Today's Health—Mrs. Victor Norall, Lexington
Publicity—Mrs. Donald Purvis, Lincoln
Public Relations—Mrs. D. B. Wengert, Fremont
Program—Mrs. R. H. Kohtz, Bloomfield
Bulletin—Mrs. Harold Morrison, Omaha
Nurse Recruitment—Mrs. George Stewart, Norfolk
Civil Defense—Mrs. Leo Hughes, Omaha
News Letter—Mrs. R. E. Garlinghouse, Lincoln
Resolutions and Revisions—Mrs. Herbert Staubitz, Omaha
Advisory Council—
  Dr. J. P. Gilligan, Nebraska City
  Dr. John McGreer, Lincoln
  Dr. J. Phil Redgwick, Omaha

The following resolutions were presented and passed by the Woman's Auxiliary to the Nebraska State Medical Association, during its annual session, May 11-14, 1953, at Omaha.

Whereas, We consider it fitting and proper to express our thanks to all those who have contributed to the success of this convention and to the accomplishments of our past year's work; Therefore Be It

Resolved, That we, the members of the Woman's Auxiliary to the Nebraska State Medical Association, express our gratitude to the officers and other members of the Executive Board of our organization who have given so generously of their time and efforts to transact the business necessary for the proper functioning of the Auxiliary; and Be It

Resolved Further, That our thanks and appreciation go to the Omaha-Douglas County Auxiliary, hostess to this Twenty-eighth Annual Meeting, for its kind hospitality and welcome to all of us; and Be It

Resolved Further, That we voice particular gratitude to Mrs. James J. O'Neil, General Chairman, and to her entire Convention Committee for their many courtesies and their thoughtfulness in planning for our comfort, convenience, and entertainment; and Be It

Resolved Further, That our grateful thanks go to Dr. George Covey, Editor of the Nebraska State Medical Journal, for the generous space he has given us for our Auxiliary news and the helpful assistance we have derived by his printing the minutes of the Executive Board Meetings and the Annual Meeting in the April issue of the Journal, and Be It

Resolved Further, That the Nebraska State Medical Association be advised that we appreciate their leadership, and are thankful for their ever ready help, especially the financial assistance they are providing in making possible our future News Letter, and Be It

Resolved Further, That the Advisory Council, namely, Dr. Lynn Sharrar, Dr. Raymond Lewis, and Dr. Robert Morgan, be informed of our gratefulness for their guidance throughout the past year, and Be It

Resolved Further, That we re-pledge our loyalty to the Woman's Auxiliary to the Nebraska State Medical Association, and be faithful in supporting its activities, promoting its projects, and enlarging its membership; and Be It

Resolved Finally, That these resolutions be printed in the Nebraska State Medical Journal.

MRS. H. F. STAUBITZ,
Resolutions and Revisions Chairman

The Tri-County Medical Auxiliary met on April 14th, at the Riverside Golf Club in Grand Island.

Officers for the coming year were elected as follows:

President—Mrs. Warren Bosley
Vice President—Mrs. J. G. Woodin
Secretary—Mrs. Harvey Anderson
Treasurer—Mrs. Robert Holland

Plans were made to assist in purchasing a new bed for the pediatrics ward at the Lutheran Hospital in Grand Island.

In December, the Auxiliary gave the pediatrics ward at St. Francis hospital a record player and are now supplying them with a record each month.

Officers were elected for the coming year, when the Buffalo County Medical Auxiliary met, in April, at the Fort Kearney Hotel in Kearney. Mrs. H. C. Hansen was re-elected president; Mrs. R. D. Johnson, vice president, and Mrs. L. G. Steffens, secretary-treasurer.

The business session followed a dinner attended, also, by members of the Medical Association.

The evening's program featured a report, by Mrs. B. R. Bancroft, on the progress of plans for the local training of a class in practical nursing.

A dinner meeting at the Hastings State Hospital highlighted a meeting in April, of the Auxiliary to the Adams County Medical Society.

Mrs. C. L. Kleager, treasurer, reported five new members have joined the group, bringing the membership to twenty-two. They are Mrs. Warren Richards, Mrs. Gerald Kuehn, Mrs. H. J. O'Donnell, Mrs. G. L. Sandritter, and Mrs. Samuel Moessner.

Following a dinner, the Auxiliary members joined the doctors to view a medical film.

Know Your Blue Shield Plan

The House of Delegates of the Nebraska State Medical Association unanimously accepted the annual report of the Prepayment Medical Care Committee and gave official approval and commendation to Nebraska Blue Shield at the annual Session in Omaha last month.

"Blue Shield is not an agency to insure every doctor's fee for every service he renders. Its purpose is most definitely not to insure him against all bad accounts and assure him of 100 per cent collections. There is only one real objective of Blue Shield: to assure Mr. and Mrs. Average American and their children adequate hospital and medical care at a price they can afford to pay."

Approximately 2,000 Nebraskans joined Blue Cross-Blue Shield during the Individual enrollment campaign conducted during April. The campaign was publicized by means of a series of newspaper advertisements and promotional literature which hospitals and doctors distributed. Doctors who recommended membership to their patients played an important part in the success of the enrollment campaign. Continued active endorsement of Blue Cross-Blue Shield by doctors is very necessary if a steady growth in membership is to be maintained.

Reminder: Blue Shield cannot pay for care of fractures or dislocations unless they are confirmed by x-rays.

This is no time for complacency as regards the voluntary health care movement. To continue our upward curve in total enrollment, it will require as much initiative, ingenuity and drive as has been shown in the past. It must be proved, beyond a question of a doubt, that the voluntary health insurance plans can "do the job." To succeed, they must continue to expand their coverage and benefits, and at the same time keep the cost within the limits which the average American family can afford to pay.

Nebraska State Department of Health

MICROBIOLOGY

A Research Program in Microbiology was held in Kansas City April 16. Some of the subjects discussed were: "Relationship of Sectional Research Program to the Responsibilities of Federal Civil Defense Administration;" "Relation of Sectional Research Program to Epidemic Intelligence;" "Report on Animal Epidemic Outbreaks in the United States: Anthrax, and Vesicular Exanthema," and "The Role of the Pathologist in Diagnosis of Infectious diseases."

THE MIDDLE STATES PUBLIC HEALTH ASSOCIATION

This Association met in Topeka, Kansas, April 13-15. Public Health personnel and community leaders from twelve states assembled to discuss public health problems such as: Nutrition; educational techniques in using literature, films, etc.; Public Health Nursing; Maternal and Child Health programs; epidemiology and preventable disease; sanitation problems and health programs in rural organizations.

Twelve states are included in the Middle States Public Health Association: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Ohio, Nebraska, North Dakota, South Dakota, and Wisconsin.

Deaths

Jens P. Jensen, M.D. Doctor Jensen died on April 6th, at the age of eighty-two years. The doctor had practiced medicine in Plainview for fifty years. He was on a train returning from a visit to his daughter in California, when he became ill, and was hospitalized in an Omaha hospital. He is survived by his one daughter, Mrs. C. W. Goss.

George Griot, M.D. Doctor Griot was formerly a Nebraska physician, having practiced in Chadron. He died in Springfield, Missouri, where he lived at the time of his death. His death occurred on April 29th.

Human Interest Tales

Comunications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. B. H. Baer, Ashland, has been appointed city physician.

Dr. P. H. McGowan, Columbus, has been named city physician.

Dr. E. F. Pischke, formerly of Hay Springs, has begun practice in Central City.

Dr. Frank Herhahn, Scottsbluff, is a candidate for the local board of education.

Drs. Fay Smith and E. E. Yaw of Imperial, have moved into their new office building.

Dr. and Mrs. John C. Baker, Sutherland, are the parents of a new son, born April 30.

Dr. Frederick Gillick, Omaha, is the new president of the Nebraska Heart Association.

Dr. Paul Baker, Scottsbluff, was severely injured in an automobile collision April 9.

Dr. W. W. Arrasmith, Alliance, attended a meeting of the American College of Physicians in April.

Dr. Vernon Deyke, Columbus, presented a paper on "Cancer" before the local Lions Club on April 6.

Dr. George L. Clark, Omaha, is the new Medical Director of the Red Cross Omaha Regional Blood Center.

The Journal extends its sympathy to Dr. L. T. Gathman, South Sioux City, upon the recent death of his father.

Dr. Sanford Rathbun, Beatrice, attended the American College of Physicians meeting in Atlantic City in April.

Dr. George Walker, Lincoln, has been elected Vice President of the American Association of Railway Surgeons.

Dr. Hodson A. Hanson recently opened an office in Lincoln. His practice is limited to obstetrics and gynecology.

Dr. Paul Marx and family of Lincoln were slightly injured in an automobile collision, April 16, near Brule, Nebraska.

Dr. Hans Meyer, Ingleside, attended a meeting of the American Psychiatric Association held in Los Angeles recently.

Dr. R. F. Mueller, Lincoln, discussed the topic of surgical records before the Lincoln Medical Librarians Club recently.

Dr. and Mrs. Herbert H. Davis, Omaha, have returned from a month's vacation in California, Arizona and New Mexico.

Dr. Dwight Burney, Omaha, was guest speaker at a meeting of the Dawson County Medical Society on April 13 at Lexington.

Dr. George W. Reneker, who practiced medicine for 58 years, much of it in Falls City, recently celebrated his 89th birthday.

Dr. Frank Barta, Ord, has announced his retirement and moved to Napa, California. His address there is 181 Franklin Street.

Dr. C. O. Eigler, a former Nebraskan, but more recently a resident and practitioner in Colorado, recently celebrated his 90th birthday.

Dr. James F. Kelly, Omaha, was principal speaker at a public meeting in Kearney on April 14. His paper dealt with the cancer topic.

Dr. Herman M. Jahr, Omaha, is author of a paper which appeared in the April issue of "Today's Health," under the title of "Leukemia."

Dr. L. C. Steffens, Kearney, spoke to the local Professional Nurses Association April 13 on some of the newer trends in post-operative care.

Dr. John Thompson, a 1952 graduate of the University of Nebraska College of Medicine, plans to begin practice in Auburn about August 1.

Dr. Charles D. Yohe, a graduate of the University of Nebraska in 1945, has been appointed superintendent of the Yankton, S.D., State Hospital.

Dr. W. J. Arrasmith, Grand Island, has returned from a vacation trip to California and is now located in his new offices in the Masonic Building.

Dr. Melvin Hoyt, who practiced at Mullen for three years, has moved to Palisade where he is occupying the offices of the late Dr. A. B. Fellers.

Dr. and Mrs. Raymond G. Lewis, Omaha, recently spent two weeks in Palo Alto, California, where their son is a student at Stanford University.

Dr. R. C. Fenstermacher, formerly of Auburn, has moved to Nebraska City where he is associated with Drs. J. P. Gilligan, W. C. Kenner and Glen Burbridge.

Dr. W. H. Griffith, Lincoln, spoke to members of the Nebraska State Nurses Association, District 3, in Lincoln, April 8, on "What Do You Know About New Drugs?"

Dr. Donald R. Jackson, Omaha, was the principal speaker, April 22, when the Bruning community dedicated its new street lights. Doctor Jackson was reared in Bruning.

Dr. James D. Bradley, Omaha, spoke to members of the local AMVET Post No. 1, April 27, on "The Specialty of General Surgery As It Affects the Lives of Returned Veterans."

Dr. James E. Lewis, who formerly practiced at Scotia, now has the following address: Major James E. Lewis, 062780, 351st Surgical Hospital (MA), APO 46, New York, N.Y.

Three Omaha physicians, Drs. M. C. Howard, Ralph Luikart and S. J. Carnazzo, presented the scientific program for the Cass County Medical Society in Atlantic, Iowa, on May 6.

Dr. C. A. Rydberg, who has practiced medicine at Litchfield for 49 years, was honored by his community at an open house celebration on April 19. Dr. Carl Amick, Loup City, was guest speaker for the occasion.

Five Lincoln physicians have announced plans for the construction of a new office building at 13th and E Streets. They are: Drs. J. E. M. Thompson, C. F. Ferciot, W. W. Bartels, F. S. Webster and Paul Goetowski.

The Atkinson Graphic announced during the latter part of April that Dr. William J. Douglas of Atkinson, has retired. Doctor Douglas was honored by his community last October for his more than 50 years of medical practice.

Dr. and Mrs. Glenn Whitcomb, Omaha, have returned from Chicago. While there, Doctor Whitcomb attended a meeting of the American Association of Railway Surgeons. Doctor Whitcomb is a former Vice President of the organization.

Dr. Harold Gifford, Jr., Omaha, was author of a paper appearing in the April issue of the South Dakota Journal of Medicine and Pharmacy. Title of the paper was "The Post-Operative Care of Eye Cases 25 Years Ago and Now."

Dr. Harry Henderson, who practiced at St. Edward until he was recently inducted into the service, is stationed at Wolters Air Force Base, Mineral Wells, Texas. Doctor Henderson is assigned to the 325th Engineer Aviation Group.

Dr. Edmund C. Zimmerer, a graduate of Creighton University School of Medicine, 1911, has been appointed Commissioner of Health of Iowa. He formerly was the director of the Division of Cancer Control for the Nebraska State Department of Health.

Dr. L. E. Dickinson, Sr., Ravenna, has returned from Richmond, Virginia, where he represented Nebraska at the first Western Hemisphere Conference of the World Medical Association. Doctor Dickinson was appointed by Former Governor Val Peterson to represent the state at the conference.

Dr. John A. Tamisiea of Omaha attended the twenty-fourth annual convention of the Air Line Medical Examiners Association held in Los Angeles. Dr. Tamisiea is a past president and is now vice president of this association. He acted as moderator of a panel discussion on "Problem of the Aging Pilot."

Dr. Floyd L. Rogers, Lincoln, and Dr. Ruth M. Leverton, Ph.D., Professor of Home Economics at the University of Nebraska, are co-authors of a book, "Your Diabetes and How to Live With It." The book, published by the University Publishing Company, contains many different diets and deals with individual control of diabetes.

Dr. O. V. Calhoun, Lincoln, spoke to members of the Lincoln Rotary Club, April 7, on the importance of keeping weight at the proper level. Doctor Calhoun used a unique inovation in conjunction with his paper. Each Rotarian was weighed during the session. The final result showed that the 101 Rotarians weighed 20,524 pounds, for 1,720 of excess weight.

TUBERCULOSIS ABSTRACTS

(Continued from page 221)

dition is low, housing poor, and homes overcrowded. Excellent cooperation was obtained from the Indians throughout the study.

The initial phase of the study consisted of determining the mortality and morbidity from tuberculosis and the incidence of tuberculosis infection in the general population. The incidence of tuberculous infection as determined by the tuberculin test varied little on the different agencies. The mortality rate from tuberculosis on the Indian reservations studied ranged from 200 to 300 per 100,000, while the mortality rate in Alaska ranged from 500 to 600 per 100,000.

The morbidity from tuberculosis was determined by roentgenologic examination of the chest of an unselected sample of the population. Pulmonary lesions compatible with a diagnosis of tuberculosis ranged from 1.1 per cent of those examined roentgenologically on the Pima Agency, Arizona, to 6.9 per cent among those living in southeastern Alaska. Data compiled by the Tuberculosis Control Unit of the Indian Service, indicated a high incidence of tuberculous infection and disease.

The group to be included in the evaluation of BCG vaccine was next selected. School and preschool age children, all of whom were negative to 0.00002 mg. and 0.005 mg. of purified protein derivative (PPD) tuberculin, were placed by an alternate division of cards into one of two groups. These groups were comparable in numbers, age, and sex. One group received a single intracutaneous injection of freshly prepared BCG vaccine and were not revaccinated during the study. The second group received an intracutaneous injection of isotonic soduim chloride solution and served as controls. Neither group was isolated before or after vaccination, and no change was made in their mode of living. Both groups were examined annually by means of x-ray and tuberculin tests for from nine to eleven years.

The mortality from all causes and from tuberculosis was again determined 15 years after the study was initiated. The cause of death was based on roentgenologic and laboratory examinations, clinical records, nurses' notes, and personal interviews with relatives in those few cases in which diagnosis had not been established. In no instance was the death certificate diagnosis accepted without further careful investigation. During the 13 to 15 years of observation a total of 71 vaccinated and 128 controls died from all causes. Among the 1,551 vaccinated persons observed for a total of

(Continued on page xxiii)

50 *and six*

YEARS TREATING ALCOHOL AND DRUG ADDICTION

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CALIFORNIA

A new illustrated booklet is available, describing the hospitals of the California Department of Mental Hygiene and listing the professional opportunities there. Physicians are invited to write for this publication.

California State Personnel Board
1015 L Street Sacramento 14, California

The Neurological Hospital
2625 West Paseo,
KANSAS CITY, MISSOURI

* * *

A voluntary hospital providing the care and treatment of nervous and mental patients and associate conditions.

TUBERCULOSIS ABSTRACTS

(Continued from page 232)

21,245.5 person years, 12 died from tuberculosis, a rate of 0.56 per thousand person years of observation. Among the 1,457 controls observed for a total of 19,520.5 person years, 65 died from tuberculosis, rates of 3.32 per thousand person years. Among the vaccinated persons and controls 59 and 63, respectively, died from nontuberculous causes. Of the 12 deaths from tuberculosis among the vaccinated group, six were due to pulmonary tuberculosis, and six to nonpulmonary forms. Of the 65 unvaccinated controls who died from tuberculosis, 32 died from pulmonary tuberculosis, 31 from acute miliary or similar forms of tuberculosis including tuberculosis peritonitis, and two from bone and joint tuberculosis. The vast majority who died from generalized tuberculosis had been negative to tuberculin within the year of death or had become positive for the first time within that period.

The observed data over a period of 13 to 15 years support the concept that there is a close but not absolute relationship between resistance to reinfection and hypersensitivity. Hypersensitivity among the vaccinated, of whom 12 died from tuberculosis, ranged from 93.3 per cent one year following vaccination to 90.2 per cent 11 years later. Among the unvaccinated controls, 65 of whom died from tuberculosis, hypersensitivity increased from an incidence of 12.7 per cent one year after the initiation of the study to 41.7 per cent after 11 years.

—By Joseph D. Aronson, M.D., and Charlotte F. Aronson, A.B., Journal of the American Medical Association, May 24, 1952.

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The Nebraska State Medical Journal

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EDITORIAL

CAN WE CHANGE THE LEOPARD BY PAINTING HIS SPOTS

A determined attempt was made to induce the House of Delegates of the American Medical Association, meeting in New York during the 1953 annual session, to declare immediately that osteopathy is no longer a cult.

During the 1952 sessions of the House, in Chicago, Dr. John W. Cline of California, the retiring president of the A.M.A., made a plea for liberalization of the attitude of physicians toward osteopathic schools. At the interim session in Denver last December, the House of Delegates recommended a study of the relations between osteopathy and medicine. A committee having Dr. John W. Cline as chairman, made such a study and reported the results to the Board of Trustees.

In the New York session, the subject was introduced by a resolution by Dr. J. Lafe Ludwig for the California Medical Association. This resolution follows:

"Whereas, the practice of osteopathy has been recognized legally by all states and unlimited licensure to practice medicine and surgery is granted to graduates of schools of osteopathy in a large majority of states; now, therefore be it

"Resolved, that the House of Delegates believes that it would be in the interest of the health and medical welfare of the American people if the American Medical Association were to adopt a policy of assistance by doctors of medicine in the undergraduate and postgraduate education of doctors of osteopathy."

The Committee for the Study of Relations Between Osteopathy and Medicine made four recommendations. The first of these was the one which aroused extensive debate. It was as follows: "1. That the House of Delegates declare that so little of the original concept of osteopathy remains that it does not classify medicine as currently taught in schools of osteopathy as the teaching of 'cultist' healing."

A minority report by certain members of the reference committee was brought to the floor of the House seeking to force an immediate vote favorable to the proposition of declaring that osteopathy is no longer considered a "cult." A spirited debate, that lasted two hours, showed that there was surprising support for this proposition. Steadfast argument by the more conservative element included statements that no matter whether the House voted today, next year or ten years hence, osteopathy would still be a cult; and, that if we declared now that osteopathy is not a cult we would be faced immediately with the chiropractic group asking for a similar declaration regarding their mode of practice. It was as if any "declaration" we might make could change the facts.

The conservative element, having no axe to grind excepting to uphold the dignity of our profession, finally won a stay of one year and the House adopted the recommendations of the majority report of the reference committee, which follows:

"Because of the length of the report and the controversial nature of the subject, the Board feels that the House should have adequate time for its study and that the state associations should have opportunity to express their opinions.

"Therefore, it is recommended that the committee be continued but that action on the report be deferred until the June, 1954, session. It is suggested that at that time the House be prepared to answer the following questions:

"1. Should modern osteopathy be classified as 'cultist' healing?

"2. Since the objectives of the American

Medical Association include improvement in the undergraduate and post graduate education, should doctors of medicine teach in osteopathic schools?

"3. Should the relationship of doctors of medicine to doctors of osteopathy be a matter for determination by the several state associations?"

Those who are in a position to know the facts, as we are in Nebraska, can not be convinced that osteopathy is no longer a cult. Regardless of the statements made by osteopaths and their school catalogues, medical instruction comparable to that demanded of our own class A schools is not being taught in most schools of osteopathy. Our state association should instruct its delegates to the 1954 session of the American Medical Association to vote against the proposition that osteopathy is no longer a cult. A "declaration" by the House of Delegates of the American Medical Association can not change the actual character of osteopathy any more than painting a leopard's spots can change the character of the animal.

SUPPLEMENT PRAYER WITH ACTION

An editorial that appeared in the Journal last March summarized the actions of the House of Delegates of the American Medical Association relating to the treatment of non-service-connected disabilities in veterans' hospitals. It was pointed out that the American Legion made a showing of cooperation with the A.M.A., the American Hospital Association, and others, toward getting "the chiselers out." An article by Commander Gough in the American Legion Magazine was quoted to emphasize the wide divergence in points of view of this service organization and of the A.M.A.

In accord with instructions from the House of Delegates, a committee from the American Medical Association proceeded to hold conferences with representatives of the American Legion, other organizations, from the various branches of the Armed Services, and other interested parties. These conferences were dedicated to finding common grounds for future definitive action. These efforts ended in failure because the aims of the various participants were too divergent to allow any hope of united effort.

In the recent sessions of the House, in New York, eight resolutions were introduced by as many states, all opposing the care of non-service-connected disabilities by veterans' hospitals. The Reference Committee on Insurance and Medical Service submitted a recommendation as a substitute for these eight resolutions. The House adopted this recommendation, the substance of which is that the treatment of non-service-connected disabilities by the Veterans Administration should be discontinued. In taking this action the House reaffirmed and adopted the recommendations made by the Special Committee on Federal Medical Services at the interim session held in Denver last December.

The adoption of these recommendations serves only to announce that the doctors composing the A.M.A. stand together having a unanimous opinion opposed to this type of state medicine. We can only hope that this action may initiate an effective campaign designed to accomplish the discontinuance of care of non-service-connected disabilities in veterans hospitals, having in mind those exceptions that we have always made.

Any campaign to attain the ending of the invasion of private medical practice by federal medical service must concern itself with more than the treatment of non-service-connected disabilities by the V.A. There are other, even more threatening aspects of federal medical service. It is becoming more and more evident that the veteran is only a symbol in this matter. There is an undercurrent of threat that the dependents of veterans should be included in this free (?) service. There is, also, the fait accompli of care for dependents of service personnel. This care is furnished, in part, if not largely, by physicians who have been taken from their civilian practices into the armed forces, presumably to take care of soldiers. There is the apparently senseless building of hospitals by the Federal government in great excess of the needs. Some of these hospitals have an occupancy rate as low as eight per cent and there is quite a list of them having an occupancy of thirty per cent or less.

Are these all "pork-barrel" projects for the benefit of the Senators or their friends, or are they part of a concealed plan to accommodate a larger and larger segment of our population? One must remember that we now have some twenty-two million veterans. How many dependents do these veterans have? Perhaps we need to get off of our knees and try to implement our prayers by action.

Presidential Address

HAROLD S. MORGAN, M.D.
Lincoln, Nebraska

The turn of the century found the Nebraska State Medical Society meeting in Omaha for its Thirty-Second Annual Session. There, under the presidency of Dr. Robert McConaughy of York, 127—or one-third of the total membership—attended the three-day session. In reviewing the proceedings, I was tempted to present, as a major portion of this address, a recapitulation of the practice of obstetrics of that time, for no less than 12 out of a total of 37 presentations dealt with obstetrical problems, no less interesting today than 53 years ago; however, time will not permit divergence into these intriguing by-paths.

Concerning myself primarily with a search into the problems facing the profession as a whole in 1900, I find the 320 doctors of the society striving desperately to protect the people of the state against quackery and medical charlatans. Although memership in the society was restricted to regular physicians, as contrasted to homeopaths and eclectics, we find the three groups had worked somewhat together to formulate laws for a state board of health and for legislation defining the practice of medicine which, in effect, excluded the osteopaths, drugless healers, and other cultists. That the fight to maintain the advantage gained by legislative action was not easy is attested to by repeated references to running this and that quack out of a community. The education of the people, the relationship of the "Regulars" and the press and matters concerning the public health are reminiscent of some of our problems today. The society concerned itself, too, with the welfare of its medical brethren, criticism and indignation being expressed over the death from smallpox of one Doctor McColm, who apparently was denied medical attention because the people of the community, through fear of the spread of the disease, would not permit the local doctor to care for this sick fellow-physician.

In the closing paragraph of Dr. McConaughy's presidential address, we find this sentiment. "WE are largely responsible for the position in which we find ourselves with respect to the public. We are the guardians of the public health, and if we do not watch well the gateways, if we do not raise the educational standard among the people, we cannot expect to win their respect. Let us not be afraid to face the problem that confronts us, and put an end to Quacks and Quackery."

A quarter of a century later in 1925 the Nebraska State Medical Society had become incorporated under the laws of the state as an association, with organized county medical societies holding regular meetings and sending elected delegates to the Annual Session of the Association.

The association established and started publication of its own journal in 1916 and at the quarter century mark carried the latest scientific thought, as well as accounts of the association's business, to the offices of the 1,209 members at monthly intervals. A review of editorials, the presidential messages of Dr. Palmer Findley and the proceedings of the House of Delegates of 1925, brings to light the fact that the members were still concerned with cultism. A questionnaire on "Medical Problems in Nebraska," brought forth spirited replies, but the preponderance of opinion seemed to favor "directing the efforts of organized medicine towards higher achievements within its own ranks; of educating the public in things medical to the end that they may know what the regular medical profession has done and is doing to safeguard the public health; and, finally, endeavor to bring about legislative enactment that will compel all who presume to practice the healing art, and by whatever name, to subscribe to the same educational standards."

The publicity committee of that year, thinking in terms of the future and undoubtedly laying plans for legislative action in the forseeable future, recommended to the House of Delegates that a sum of money in the neighborhood of $10,000 be raised through an increase in the dues "to be applied through a special agent whose duties will be that of bringing about an acquaintanceship on the part of the public of what the profession of medicine is attempting to accomplish."

That the association was also interested in medical education is attested to by the report

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*Read before Annual Convention Nebraska State Medical Association, May 12, 1953.

of the delegate to the Annual Convention on Medical Education, Medical Licensure, Public Health and Hospitals, and the presidential address of Doctor Findley who dealt with the "Problem of Medical Education and the General Practitioner."

There is not time to dwell upon the activities of the association during the next twenty-seven years. Suffice it to say that the well prepared campaign alluded to in the 1925 proceedings bore fruit two years later in the passage of the Basic Science Law, thus effectively controlling the cults and irregular practitioners. Many times, since its passage, attempts have been made to negate its provisions, but constant watchfulness during the legislative sessions has preserved its integrity.

At the end of this quarter century, 1949-50, the Nebraska State Medical Association had voted to expand the activities and sphere's of influence of the organization. The battle against socialization of medicine was shaping up into an all-out effort to sell the American people on the dangers of the socialistic trends in the country, and to promote the idea of voluntary prepaid health insurance. Where the physicians of 1900 and 1925 were talking in terms of educating the public in respect to the dangers of the cults, the doctors of the state and the nation were educating the public to the inherent evils of the type of government that was being thrust upon us. As of November 1952, that battle has been won. In winning it, an awakening of the profession of the state to its over-all responsibilities has been achieved. We are no longer content to damn the cults and fight malpractice actions, nor do we hold ourselves aloof from activities in which other citizens of the state engage. Today's physician, while primarily devoted to the care of the sick and to matters pertaining to the public health and welfare, finds time in his daily life and in his professional meetings to study and participate in community, state, and national problems.

The expanded program of the Nebraska State Medical Association translates this change in individual thinking into association doing. In 1952-53, we find activities actually in operation that were not dreamed of in 1900, and casually mentioned in 1925. The work and the responsibilities of the Association, instead of being carried on by a small handful of men, are now participated in by many, grouped together in thirty committees.

It is the work and accomplishments of these committees that I, as your President-Elect and President, have been privileged to participate in during the past two years. In the remainder of the time allotted me, I shall attempt to convey to the general membership an over-all picure of the progress of the association due to the work of its committees. Approximately thirty-five projects are currently being studied or supervised in committee, and every one of these activities brings the Nebraska State Medical Association into immediate contact with other groups, or has some bearing on matters pertaining to the health and welfare of the State of Nebraska.

To enlarge on the work of the individual committees would be repetitious, for reports of their work have already been published; however, to illustrate the importance to the association of this committee work as a whole, I would call your attention to four projects that have had tremendous impact—not only on the medical profession—but on the citizens of the state.

Two years of hard work on the part of the Planning Committee, the Public Health Committee, and the Committee on Medical Service, brought an acceptable Board of Health Bill to the legislature for passage and the Governor's signature. Through its provisions a state Board of Health becomes the head of the Department of Health, and it has the power to select the Director of Health. Once and for all, the State Department of Health has been removed from politics. An adequate salary is now available to provide for continuing, strong leadership in matters of public health.

The problems facing the University of Nebraska College of Medicine were brought before a special meeting of the House of Delegates by the Committee on Medical Education. This committee, working long and hard, paying their own expenses, visited other medical schools, as well as Nebraska's, in order that accurate information could be presented to the legislature. Working agreements with the Board of Regents, the chancellor, and the dean, were ratified by the House of Delegates, and the legislature has passed a six million dollar building appropriation for expansion of present facilities. Additional funds for operation of a modern medical center on the College of Medicine campus in Omaha are being considered by the legislature at this time and which, if granted, will have a tremendous influence on the everyday health of the people of Nebraska, as well as providing more doctors, nurses, and technicians.

By action of the House of Delegates, the Committee on Uniform Fee Schedule and Advisory to Governmental Agencies was given the responsibility of preparing a formulary for use of the doctors in prescribing drugs for old age assistance cases. The committee has spent untold hours in the preparation of this formulary, and it is the first complete work of this type ever sponsored by a state medical association. Through the use of this formulary, drug costs to the Department of Assistance and Child Welfare should be materially reduced. Here again, through committee work, the state association carries a terrific impact into every section of the state.

The Public Health Committee, together with Nebraska Medical Foundation, Inc., and the University of Nebraska, is preparing a film on public health in Nebraska, which when finished, will be available for showing — under sponsorship of local county medical societies—in all areas of the state either as a movie or as a television short. Produced by the University of Nebraska, this film will carry a tremendous message on health needs of the state.

In addition to these worthwhile achievements, no account of the activities of our state organization would be complete without mention and commendation of the monthly sessions of the Public Relations Committee. This group is constantly on the alert to carry the messages of organized medicine to the doctors and to the people of the state just as President McConaughy suggested in the year 1900. The Rural Medical Service Committee, the Polio Coordinating Comittee, as well as the Cerebral Palsy Committee, the Maternal and Child Health Committee, the Diabetes Committee, and the Speakers Bureau Committee, have all played an outstanding part in the many facets of a modern medical association program.

Other activities, little dreamed of in the earlier years that I have mentioned, are also handled through committee work. I refer to the Council on Professional Ethics, Civil Defense, the Committee on Journal and Publication, Committee on Scientific Assembly, and Prepayment Medical Care Committee. The Nebraska Medical Foundation, Inc., approved by the House of Delegates and sponsored by the association, lends money to needy medical students, grants funds to the two medical colleges of the state for research projects, and is in a position to accept bequests from individuals and other foundations to carry out specific requests of the donor within the framework of its own articles of incorporation and by-laws.

Every activity of the committees that I have enumerated exerts some influence on our every-day life and the life of those with whom we come in contact. From a society of 320 doctors, we have become an association numbering 1215. From an operating budget of slightly over $6,000 in 1925, we are working on a budget of $46,500. Financial transactions in excess of $89,000 have been diagramed and recently sent to each member of the association. In this diagram you will note that 4.5 per cent of the association dollar is spent directly on committee work. The operating expense of projects created by the committee is charged to the general operating budget of the association.

From what has been recited above, the membership should be able to grasp the fact that the growth in necessary committee activity during the past four years has been astounding. Comittee members have gladly volunteered their time and their travel expense to carry on the work of the association. Grave decisions have been made in committee and referred to the House of Delegates for approval before committing the association to new adventures.

In the future, however, some decisions may need to be made in the interim between the annual meetings of the House of Delegates. At present there is no authorized body to make such decisions; therefore, I recommend that the House of Delegates give consideration to the possibility of utilizing the Board of Trustees as an interim executive body, acting within the policy determined by the House of Delegates. If this change is determined advisable, it would seem proper that membership of the Board of Trustees be increased to seven or nine members, thus providing greater representation. This action will relieve some of the ever increasing burden of responsibility that your executive officers now bear. I would further recommend that the Planning Committee be given the task of surveying the committee structure of this association, with the hope that committees which have outlived their usefulness will be dropped from the list of standing committees and new names and duties found for others.

As I am about to retire as President of the Nebraska State Medical Association, I must pay tribute to the men who carry on the work of the association — the committee members. Were it not for their enthusiastic support and hard work, little of the program that I have mentioned in the latter part of this address could have been accomplished.

To the headquarters office staff I extend my deepest appreciation for their cheerful cooperation; and finally, I want you all to know how much the guidance, help and friendship of our Executive Secretary — Merrill Smith —has meant to me. Without it, the year just passed would have been a nightmare rather than a pleasure.

—HAROLD S. MORGAN, M.D.

What Blue Shield Can't Pay — and Why*

GLEN E. PETERS, M.D.
Randolph, Nebraska

Doctor Peters recites and elucidates four "Basic Principles of Insurance", applies them to Blue Shield and thus makes clear to us why certain claims must be rejected. He wants the doctors to be able to discuss the contract with the patient, in the light of this basic information, in the hope that we can reduce the number of rejected claims and the resultant possible cancellations.

EDITOR

In discussing this topic I recognize that some of the things I shall say may appear trite to those of you who have made some study of insurance principles, but for the sake of discussion I shall assume that you are all doctors who have made no special study of insurance problems, and who perhaps have an inner suspicion that insurance carriers have great reluctance in paying claims.

I assure you that this is not true. Blue Shield is happy to pay any case that is just and is covered by the membership agreement, but it is operated on sound insurance principles ,and must reject claims for services not covered by the agreement.

Since Blue Shield is "The Doctors' Plan", and is sponsored by our State Medical Association, I shall assume that each of you is interested in its success, and I shall try to explain why benefits cannot be paid in all cases.

Through the years, insurance carriers have been guided by certain basic principles, some of which I shall enumerate. I believe you will recognize the validity of these in the abstract, and if you will then recognize that any claim which violates one of these principles thereby becomes ineligible for payment, it will help you to understand why some cases must be rejected.

Of the so-called "Seven Basic Principles", I shall direct your attention to four at this time, because they will help you to understand the operation of the rules guiding the payment or rejection of cases.

1. There must exist laws of mathematical probability which are applicable, so that the insurer may be able to predetermine just how often the event insured against will occur. If this is not possible, no actuary can properly determine the amount of premium which should be charged.

2. The event to be insured against must be uncertain of occurrence insofar as the insured is concerned. If the policy holder can cause the event to occur, it is evident that insurance is not possible.

3. The insurance must not measurably increase the risk. If it does, it thereby vitiates the predictability of occurrence upon which the premium is based and disturbs the balance between premium and benefits. It is obvious that no insurance carrier can pay out more in benefits than it receives in premium and remain solvent.

4. Although unlimited access to certain services rendered by doctors is not insurable, such services can be covered, in practice, by co-insurance. Co-insurance, as you may know, commonly takes the form of partial payment by the insured at the time the service is rendered, or exclusion of a portion of the bill, or a portion of the benefit. Its purpose is to reduce, or eliminate, unwarranted utilization of benefits. This principle, you will note, is employed by Blue Shield for In-Hospital medical care, where the patient pays for the first three days of hospital care.

The reason why Blue Shield is so anxious to have you understand the reasons for rejections is that every rejected case represents a potential loss of a subscriber and his dependents, together with those with whom he may discuss Blue Shield in the future.

With this prelude, let us now consider some of the things for which Blue Shield cannot pay. If you will apply some of the principles I have enumerated, you will understand why some cases cannot be paid.

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*Read at Conference of Blue Shield Liaison Committees, Grand Island, Nebraska, April 23, 1953.

For example, let us consider some instances and services where benefits cannot be paid because the frequency of occurrence is not predictable.

1. Home calls or office calls for the treatment of ordinary illness.
2. Routine physical check-ups, rest cures, or observation cases.
3. Medicines, drugs, and their administration.
4. Treatment for drug addiction, venereal diseases, nervous and mental diseases and epilepsy.
5. Office x-rays—except in accident cases. Other x-rays must be taken during a four-day hospitalization period.

In each of these cases, you will note the absence of a law of mathematical probability which would determine the frequency of occurrence, or the amount of liability which might be incurred. Therefore the amount of the premium that would be required to carry the risk could not be calculated. Such services could be the source of great abuse.

Some cases have waiting periods of one year after the effective date of the agreement before benefits will be paid. For example: Conditions existing on the effective date and congenital conditions. (Except congenital conditions in children born after the effective date of the agreement, which are covered after the child is three months old.)

This provision is to prevent a subscriber from joining the Plan and paying two or three months, having his work done and his claim paid, and then lapsing his membership, thereby making a sure profit. A basic principle of all insurance is that there must be a risk involved for both the subscriber and the company.

It is for this reason that Blue Shield does not pay for:

1. Cases covered by Workmens Compensation. (Injuries during employment).
2. Care in a Veterans Adminstration or any hospital operated by the government.
3. Care as a result of military service.

If these cases were covered by Blue Shield, a subscriber could have his care paid by workmens compensation or the government and then collect from Blue Shield and make a sure profit, which is a condition that is contrary to all sound insurance principles.

Maternity cases require a ten-month waiting period, to prevent a couple from joining the Plan when they learn they are to have a materniy case, solely to have Blue Shield pay the doctor bill. However, should a pregnancy be interrupted in which normal delivery would have occurred after the ten-month waiting peirod, Blue Shield will pay.

Maternity benefits can be paid only if husband and wife are both covered by a family type agreement, and only for the subscriber or spouse. This means that maternity benefits will not be paid for a dependent daughter. The reason, I believe, is obvious.

There is a six-month waiting period for some operations. They are:

1. Appendectomy—except acute cases.
2. Colporrhaphy—for cystocele.
3. Perineorrhaphy—for rectocele.
4. Salpingectomy, oophorectomy, hysterectomy and/or myomectomy.
5. Tonsillectomy and/or adenoidectomy. (Applicable to eligible dependent children only.)

You will note that in each of these cases, a subscriber might join the Plan to get his doctor bill paid, subsequently cancelling his coverage, thus making a sure profit. These cases violate the principle of insurance which requires that "The event to be insured against must be uncertain of occurrence insofar as the policy holder is concerned".

Benefits for x-rays taken in the doctor's office will be paid for accident cases only. You may say that an x-ray in a case of a suspected fracture is for diagnosis, and then raise the question as to why an x-ray taken for a suspected peptic ulcer will not be allowed. The answer is that if Blue Shield were to pay for diagnostic x-rays in the office for suspected peptic ulcer, etc., an unscrupulous doctor might suspect that half of the patients coming into his office required x-rays, and there would be no end to the x-ray bills.

In a discussion of this sort, I realize that it is impossible to cover all the items which Blue Shield does not pay, and explain the reasons. I have tried to merely set forth the basic principles which will guide you in studying the Blue Shield agreement. Blue Shield will pay benefits under the schedule of benefits, and in instances where the service is not listed in the schedule, the case will be given individual consideration.

Now, let us glance briefly at some of the possible effects of rejected cases. The Plan has to send out about three hundred rejection letters every month. A majority of these are because of a lack of understanding of the membership agreement by the doctor or his patients.

Every one of these letters represents a potential cancellation of membership by the subscriber. Since there is an average of 3.45 people covered by each Blue Shield agreement, this means that the rejections could bring about the loss of one thousand members every month.

Blue Shield is known as "The Doctors' Plan", and quite properly, the patient expects his doctor to understand the Plan. Do you understand Blue Shield well enough to be able to tell your patients just what it provides? If you do, you are a definite asset to Blue Shield.

Obviously, benefits can be paid only on proper proof of loss. More than 150 reports are returned to doctors every month because they have not been properly completed. Sometimes the doctor does not even sign his name. Many times, a history of the case is not given, and on some reports, the group and agreement numbers are omitted. With 100,000 cards in the files, the name alone is not sufficient identification. Any name can be duplicated, so the agreement number is necessary. A history of the case is needed to determine whether the case comes within the terms of the agreement. Fractures and dislocations must be confirmed by x-rays, and the charge for x-rays should be indicated.

In brief, Blue Shield is happy and anxious to pay benefits for all valid cases if given the requisite information on the report. Since there is not a single mind reader in the claim department, each doctor should make sure that his reports are properly completed.

Each of us must remember that for every benefit, there has to be a corresponding premium, and when we are tempted to ask why Blue Shield does not cover this or that additional service, we should ask, "What additional premium would be required to cover that additional risk?", and "Would I Like to have that amount added to the present rate?" With the administration cost consistently below ten per cent, it is obviously impossible to add benefits without a corresponding increase in the premium rate.

In closing, I suggest that if you have a case that you think Blue Shield should pay, that you read your Blue Shield agreement carefully to determine under which clause Blue Shield agrees to pay. If the case meets the conditions as there set forth, I assure you that Blue Shield will be happy to pay. No insurance company could continue to operate if no benefits were paid, but keep in mind that insurance carriers are considered fair game if someone can figure out a way to chisel them out of some money. They must protect themselves from abuses that some subscriber or doctor may devise.

Again, I say to you—Blue Shield is YOUR PLAN.

MILIBIS-ARALEN FOUND MOST EFFECTIVE IN THREE-YEAR STUDY OF AMEBIASIS

The combination of Milibis and Aralen proved the most effective and least harmful of various drugs used in over 500 courses of treatment for amebiasis, according to a paper in the Journal of the American Medical Association (Vol. 151, No. 13, March 28, 1953).

The finding was reported by Dr. Julio Sanchez Vegas on the basis of a three-year study conducted in Caracas, Venezuela, involving 264 patients with amebiasis. Follow-up physical and stool examinations ranged from a minimum of six months to a maximum of 24 months.

Successive groups of patients were treated with Milibis, terramycin, chloramphenicol and aureomycin; with Milibis combined with each antibiotic; and with Milibis-Aralen. Failures on one course of treatment were transferred to other treatment groups, with the total number of courses administered ultimately amounting to over 500.

Dr. Sanchez Vegas reports that Milibis (bismuth glycolylarsanilate) and Aralen (chloroquine diphosphate), in the proportion of 500 mg. to 150 mg. given twice daily for 15 days, was the most effective of the preparations, from the viewpoint of therapy and minimal side-effects. In the group of 102 patients receiving different concentrations of the amebacide, tests showed that 91, or 89.2 per cent, were finally freed of cysts. Most favorable results, plus fewer and less marked reactions, were noted with the 500 mg. - 150 mg. dosage.

Patients treated in this manner showed a "very satisfactory" subsidence of such clinical symptoms as nausea, vomiting, pruritus ani and diarrhea after the first and second weeks of treatment, the JAMA paper states. The compound was effective even when some degree of liver involvement was evident, Dr. Sanchez Vegas says.

He concludes with the statement that amebiasis should be considered as a systemic rather than a purely intestinal disease.

Milibis-Aralen is supplied by Winthrop-Stearns, Inc.

Hematuria*

H. V. MUNGER, M.D.
Lincoln, Nebr.

After brief enumeration of medical and non-urological conditions which may induce hematuria, the author confines his discussion to lesions within the urinary tract that frequently result in bleeding. He stresses the need for an accurate history providing four main items of information, before proceeding with definitive investigation. Besides consideration of the lesions from the viewpoint of pathology, he divides them into categories based on their anatomic location within the urinary tract. Many of the conditions under discussion are well shown in his illustrations.

EDITOR

It is axiomatic, among urologists, that neoplastic disease must be ruled out in any patient who presents himself with hematuria. This symptom is of great clinical importance because, in the majority of patients suffering from malignant lesions in the urinary tract, it is the initial symptom.

Approximately two-thirds of the patients with hematuria are found to have intrinsic lesions in the urinary tract. The remainder have the bleeding as the result of systemic causes, or, from lesions of organs anatomically adjacent to the urinary tract.

Since our chief concern is with lesions of the urinary tract, only brief discussion of extrinsic sources will be presented. These causes, in general, seem to limit themselves to the group of blood dyscrasias, or, diseases in which aberrations of the clotting mechanism occur, either as the result of a pathologic process of chemotherapeutic entity, or as the result of chemotherapeutic measures employed. Hematuria is occasionally a symptom in women suffering from endometriosis, and results not only from endometrial implants in the bladder but also from ureteral involvement when pelvic implantation occurs. The most frequently cited systemic causes of hematuria are: polycythemia; leukemia; purpura; Hodgkin's disease; hemophilia; and, hypoprothrombinemia following Dicumarol administration. In adolescents and young adults, microscopic hematuria is frequently noted following either heavy exercise, or the ingestion of large amounts of protein.

Hematuria resulting from processes involving structures adjacent to the urinary tract is most often found in diverticulitis of the colon, salpingitis, and, acute appendicitis. The hematuria which appears before, during, or following an attack of acute appendicitis is usually considered to result from lymphatic transmission of the infection, or from spread by contiguity. This is a misconception. There is considerable clinical evidence to support the thesis that this hematuria results from acute or subacute glomerulonephritis due to hematogenous spread of infection to one or both kidneys. This explains the presence of blood from the left, as well as from the right side, as demonstrated cystoscopically; and, the presence of blood both before, and for as long as two weeks after, an acute attack of appendicitis.

Lesions of the urinary tract resulting in hematuria are conveniently grouped, anatomically, from above downward. Because of the accessibility to endoscopic examination, lesions in the bladder and lower tract lend themselves to rather easy detection. Lesions in the kidney and ureter, conversely, are often difficult to detect, and demand careful, and ofttimes repeated, search before a definitive diagnosis can be established.

In determining the source of bleeding the history is of great significance, particularly as far as extrinsic causes are concerned. An exact description of the bleeding is of paramount importance and there are four things we particularly want to know. First, we want to know whether the bleeding is gross or miscroscopic. Second, we want to know whether the blood is dark or bright. If dark, the source is probably located above the bladder. Third, we want to know whether the bleeding is painless or painful, and, if painful, whether the pain occurred before or after the blood appeared. If the bleeding is painless, one first suspects neoplasm as the cause. If pain follows the bleeding, it is probably due to the passage of clots; if it precedes the bleeding, the migration of a calculus is suspected. Fourth, we want to know whether the bleeding is initial, total, or terminal. If initial, attention is directed to the lower urinary tract; if total, attention is directed above the bladder neck; and, if terminal, lesions at the bladder neck are suspected. If these details of history are obtained, the anatomical location of the source of bleeding is often determined prior to the employment of definitive diagnostic measures. Urography, cystoscopy, and pyelography should be undertaken only after the above information has been compiled.

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*Presented before the Nebraska Chapter, American College of Surgeons, at Hastings, Nebraska, on Febr. 11, 1953.

Renal sources of hematuria obviously include both medical and surgical lesions. Since we are primarily concerned in this discussion, with the surgical lesions, it will suffice to mention that the nephritides, periarteritis nodosa, and hyperproteinemia are examples of medical conditions which may produce hematuria.

Six of the more common surgical lesions of the kidney will be discussed from the standpoint of hematuria. The first of these is renal tumor. Ninety per cent of renal tumors are malignant, and, of these, ninety per cent arise from the parenchyma, thus being tubular in origin. The remaining ten per cent arise from the pelvis and are the dreaded squamous cell carcinomas. The latter are remarkable for their extremely poor prognosis; no five-year cure has yet been reported.

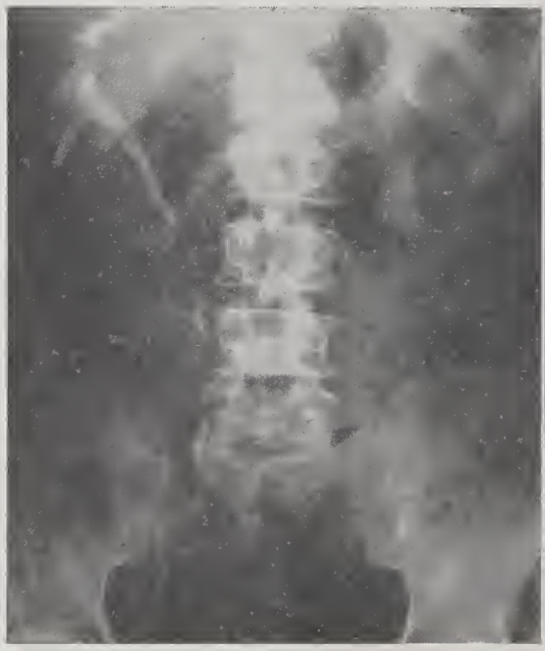
Fig. 1

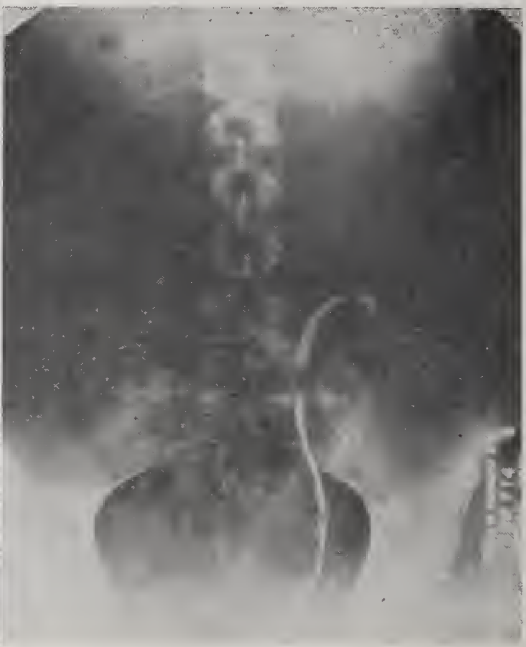
Fig. 2

Figure 1 shows the pyelogram of a 41-year-old man who had total, gross, dark, painless hematuria at one voiding six months earlier, and, who came for advice after a similar episode two days previously. Notice the displacement of the middle calices. This represents a reasonably early distortion due to clear cell renal cortical carcinoma.

Figure 2 is a retrograde study in a fifty-year-old woman who complained of total, gross, dark hematuria followed by right sided colic. Her bleeding began several months before, but only after recurrence of the bleeding and secondary clot-colic, did she seek advice. Note that the ureter is completely occluded and shows downward displacement. This proved to be a carcinoma of the renal pelvis and upper ureter.

The second condition I shall discuss is renal tuberculosis—a disease which, fortunately, is progressively decreasing in frequency. As a result of therapy with streptomycin and para-aminosalicylic acid, we see less renal tuberculosis. When it does occur, the operative risk and postoperative convalescence have been materially reduced by the prior use of these drugs. However, chemotherapy has served only to aid the surgical treatment of renal tuberculosis and has not supplanted it.

The third of the six conditions mentioned, is calculus disease. Many factors of which we are aware, and others which we do not yet recognize, combine to produce renal calculi. Among the factors that we recognize are: infection; obstruction; excessive vitamin D ingestion; avitaminosis A; hyperparathyroidism; a disturbance in vitamin B complex metabolism; and, imbalance of the purine metabolism. At the present time, great emphasis is directed to the study of colloids in the urine, and, of their increase due to the administration of hyaluronidase.

Figure 3 shows a staghorn calculus in a man in his fifth decade, who suffered from a urea - splitting staphylococcus infection.

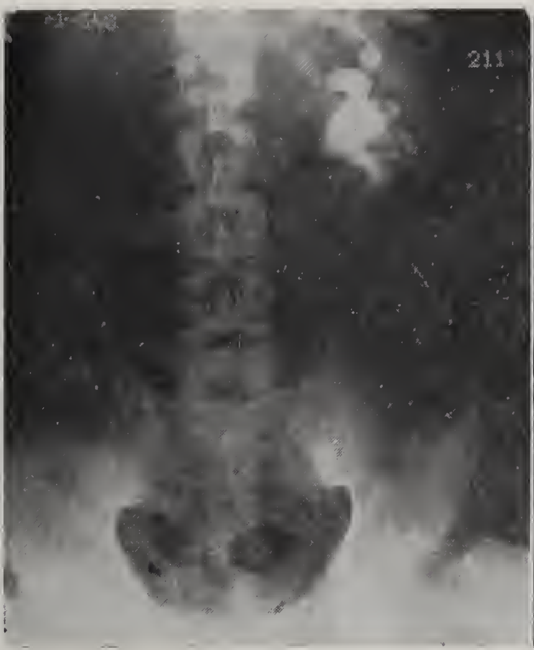

Fig. 3

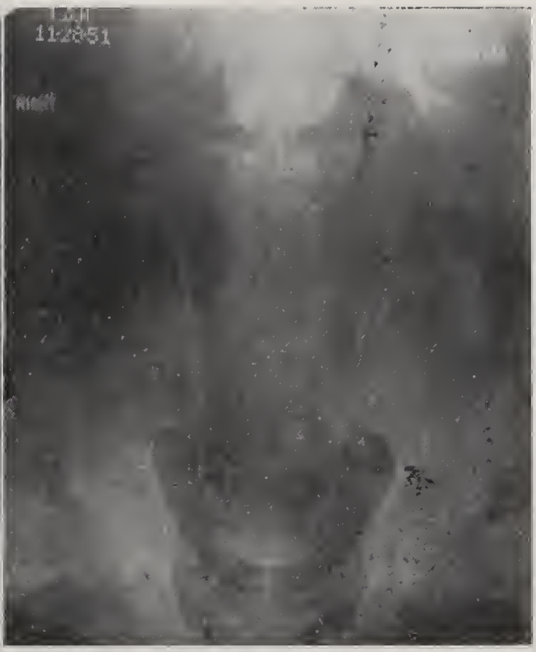

Fig. 4

The stone was removed and the kidney was salvaged.

Figure 4. This film shows a large filling defect of the right kidney of an obese man, in his fourth decade of life. The defect suggests that seen in tumor of the renal pelvis, but is caused by an infinite number of closely packed and adherent uric acid-stones. This is an example of upset purine metabolism.

Figure 5 shows a large hydronephrosis which occurred in a 24-year-old girl, during the last trimester of her first pregnancy. Gross, total, dark hematuria, followed, first by colic, then by fever, were her presenting complaints. The colon bacillus was found to be the offending organism.

Figure 6 also depicts hydronephrosis, this one being large, and involving the left kidney. The kidney has been destroyed by back pressure and secondary infection. It is interesting to note that this 48-year-old woman had no complaints directing attention to this kidney until she was convalescing

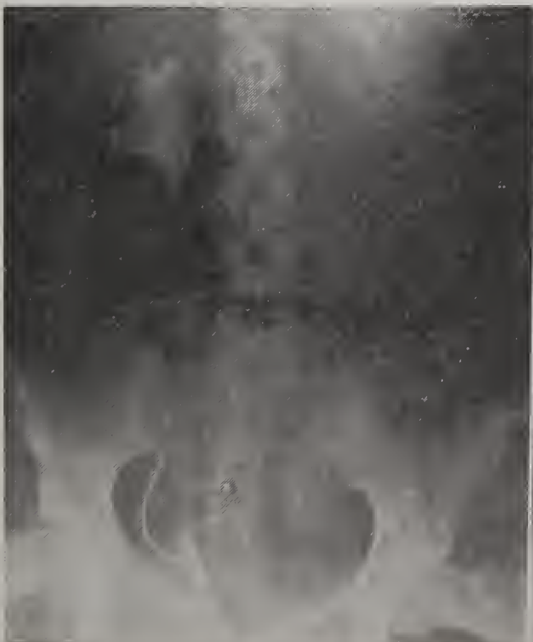

Fig. 5

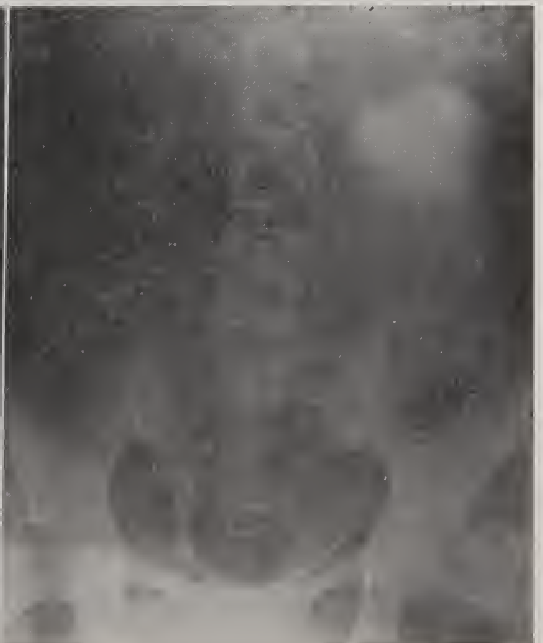

Fig. 6

following cholecystectomy. At that time, while her resistance was low, acute infection developed in this hydronephrotic kidney.

The fifth renal source of hematuria is poycystic disease. This is often a familial disorder. It is slowly progressive so that we find it, as a source of gross hematuria, in elderly persons. This disease is always bilateral, and, during its protracted course, the kidneys may attain enormous size. Occasionally, tumor occurs in these kidneys; so, re-evaluation is in order when bleeding recurs.

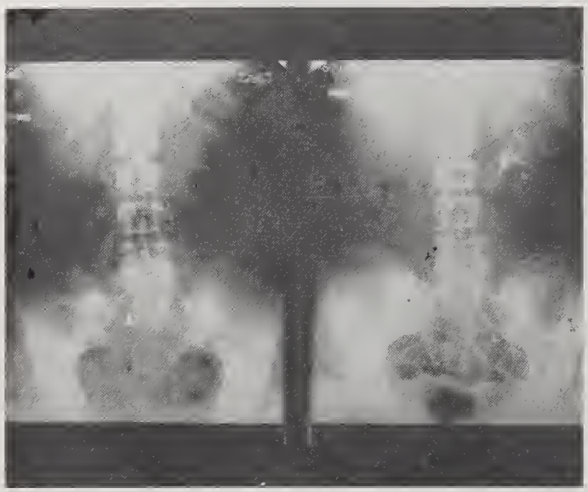

Fig. 7

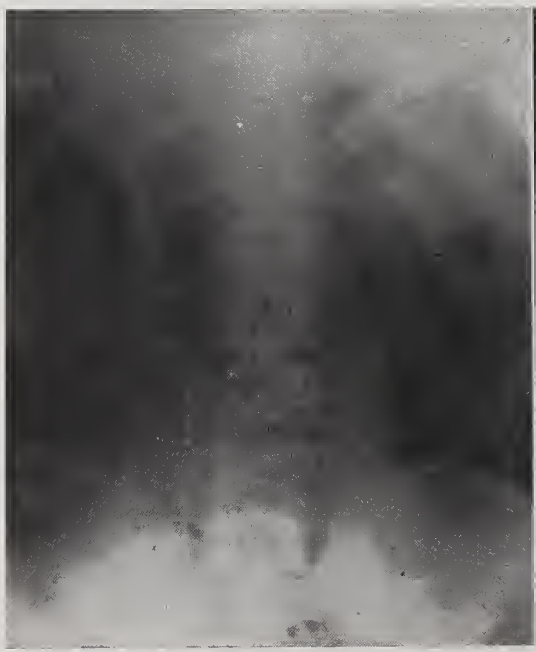

Fig. 8

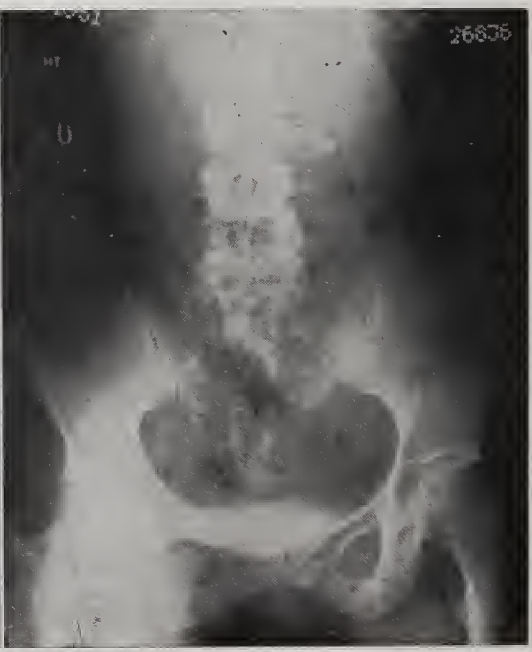

Fig. 9

The sixth and last, of the renal causes of hematuria, is thrombosis. Renal infarction may result from either arterial or venous sources. The former may produce temporary renal shutdown. If the patient weathers the storm of cardiac arhythmia, which is the usual cause, renal function may return. Venous thromboses are more dramatic. They are usually infected, and, develop from a septic focus such as enteritis, phlebitis, or pneumonia. Immediate nephrectomy may save the patient's life.

Figure 7 shows a nonfunctioning left kidney in a 58-year-old woman who had auricular fibrillation. Notice that the retrograde pyelogram is normal. This is pathonomonic of renal infarction. This patient developed sudden, left renal pain, accompanied by gross hematuria, while hospitalized for treatment of her cardiac condition.

Ureteral sources of hematuria are relatively few. In this region, calculi and tumor with, occasionally, ureteral stricture, are the chief causes of bleeding.

Figure 8 is a film showing a moderate sized calculus lodged at the upper limit of the ureter. Since this calculus had been the cause of severe colic, it was removed surgically. Hematuria and colic were the presenting symptoms.

Figure 9 shows a similar calculus. It appears to be as innocuous as the other. It is shown because this stone had been noted, at this same level, on repeated x-ray examinations by her local physician, for several weeks. She was acutely ill when admitted,

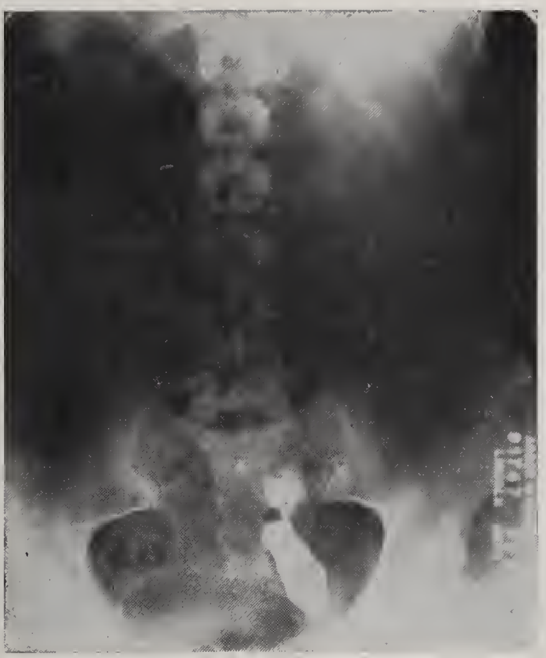

Fig. 10

and ureterolithotomy was performed without delay. A decubitus with extravasation of urine had already resulted, so a necrotic segment of ureter had to be excised, and anastamosis accomplished, over a splinting T-tube.

Ureteral tumors constitute a significant cause of hematuria. They are usually silent until they produce bleeding and colic. Like the tumors of the renal pelvis, they are radioresistant, transitional cell, and, squamous cell tumors that lead to a high mortality rate.

Figure 10 is the film of a 55-year-old housewife who presented herself with a story of gross hematuria that had recurred over a period of several months. It was not until she had colic, also, that she sought advice. At operation, metastases were demonstrable in the iliac and aortic nodes. In spite of this, she lived and felt well for years before she went downhill and died because of metastases.

The chief causes of hematuria arising in the bladder are: tumor; calculi; foreign bodies; and, inflammation. The commonest, of course, are the inflammations due to either gram-positive or gram-negative organisms.

Figure 11 depicts the cystogram of a 67-year-old man who had total, gross, bright hematuria of many months duration. The bladder is displaced by a markedly hypertrophied prostate, which has produced the visible trabeculation, and, by the large diverticulum. In the latter there was a massive papillary carcinoma. At diverticulotomy the carcinoma was found to have invaded the wall, and, to have involved the regional nodes as well as the rectosigmoid colon.

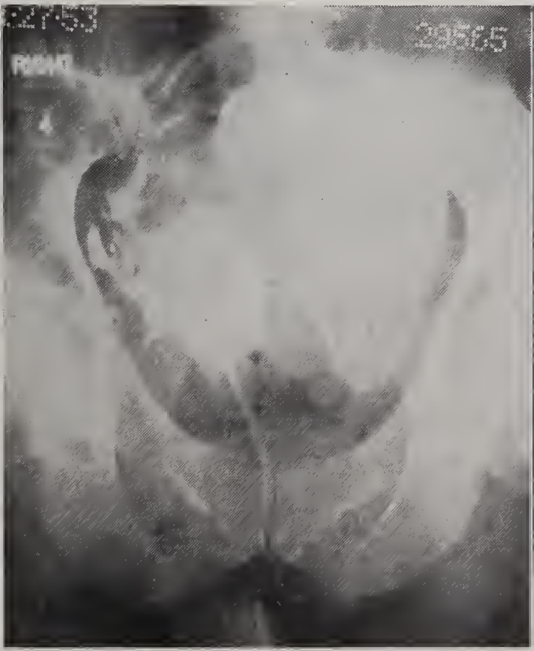

Fig. 11

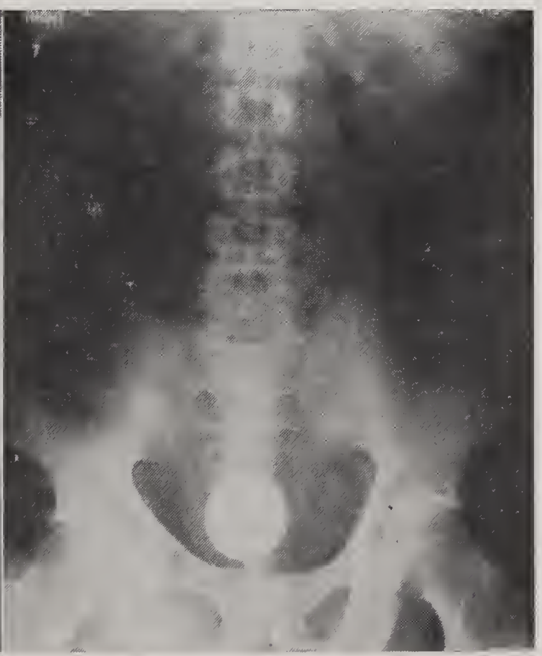

Fig. 12

Calculi in the bladder produce bleeding by virtue of ulceration caused by pressure, and, secondary infection. This film (Figure 12) represents a cue ball. I wish I could tell you it occurred in a pool-hall operator, but it did not.

Figure 13 shows a film that reveals the cause of gross, bright, total hematuria suffered by a 20-year-old girl from a neighboring state. She told us that, two weeks prior to admission she had been sitting on the floor, tailor fashion, writing a letter to her boy-friend. The pencil slipped. She did not say whether or not she finished writing the letter. Incidentally, this was a fine, gold pencil, and well worth the effort of removing it, transurethrally.

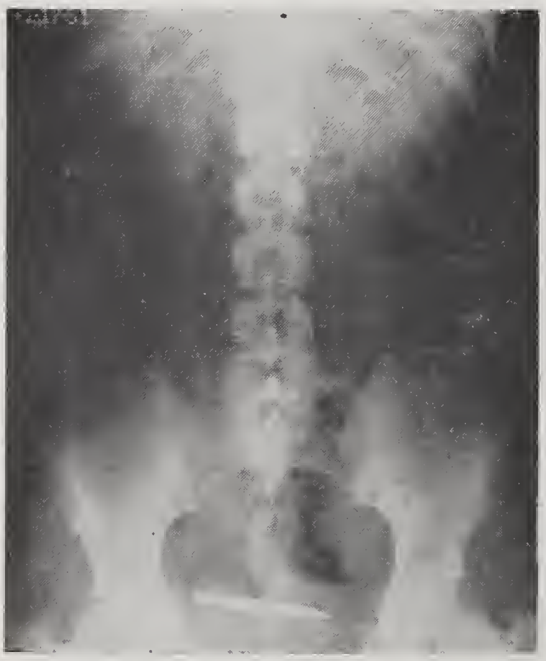

Fig. 13

Bright hematuria usually originates below the bladder level, and the more common causes are: prostatic hypertrophy; prostatic carcinoma; and, urethral involvement by infection, tumor, stricture, or foreign body. Little difficulty is experienced in determining the causative factor in the lower tract because of the accessibility to endoscopic examination.

SUMMARY AND CONCLUSIONS

Hematuria, gross or miscroscopic, is of great significance because it is the initial symptom in the majority of patients who have malignant lesions of the urinary tract.

Two-thirds of the patients with hematuria are found to have intrinsic lesions of the urinary tract. The remainder are found to have systemic causes of bleeding, or, lesions of antomically adjacent organs.

A precise analysis of the type of hematuria as to amount, color, time of appearance during urination, and, whether painful or not, will often localize the site of bleeding within the urinary tract as well a suggest the type of causative lesion.

The more important sources of hematuria, both intrinsic and extrinsic, have been noted and briefly discussed.

It should be re-emphasized that the source of hemorrhage must be determined without delay because of the several serious lesions whose initial symptom is hematuria. Neoplastic disease of the urinary tract almost universally produces hematuria. It is well, therefore, to remember Alton Ochsner's dictum that one cannot compromise with cancer. The patient who presents himself with hematuria must be investigated without delay.

ARTERIOGRAPHY CALLED MOST USEFUL IN STUDY OF EXTREMITY OCCLUSIONS

Arteriography utilizing the radiopaque compound Diodrast provides the most useful information in the study of chronic arterial occlusions of the lower extremities, according to a paper published in Radiology (60:394, March, 1953).

The conclusion is based on results obtained in 62 cases observed by Dr. B. Milanes and associates of the University of Havana Medical School. They state that arteriography, using an effective contrast medium such as Diodrast, allows the direct study of circulatory alterations of an extremity by indicating the level of arterial occlusion, the state of collateral circulation, the length of the arterial segment occluded, and the etiologic diagnosis.

Between 30 and 50 cc. of Diodrast solution were injected by means of an apparatus under positive pressure of 30 pounds per square inch, the injection being completed in five or six seconds. In all cases a preliminary sensitivity test was made by injecting a small amount of Diodrast intravenously. With this precaution the procedure was carried out without complications or significant side effects.

On analyzing the course of the cases and the data obtained by the arteriographic examination, a close relation was found which, in the majority of cases, enabled a prognosis to be made for each patient, the authors say.

Tuberculosis is worldwide and relatively few countries have progressed so far as or beyond the United States in their schemes for its control. With the notable increase in international travel and especially in aviation and now the resettlement of displaced persons, protective immigration policies assume added importance. (Kendall Emerson, M.D., Conn. State Med. J., May, 1952).

The Outlook for the Cerebral Palsied Child*

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For centuries considered a hopeless affliction, cerebral palsy today is viewed in a new light. The victims of this, the greatest of all cripplers, formerly doomed to a life of shame and despair, may now look to the future with well-founded hope.

Obviously the outlook for the individual patient is unique to himself and will depend upon numerous factors. The patients may be divided broadly into three groups: First, are the children of normal mentality but severely crippled. These children must either be placed in a hospital-school for rehabilitation or be taught at home. Second, are those mentally normal children with a moderate degree of physical handicap. They are capable of attending a school for the handicapped, or a public school on a day basis, and can be rehabilitated by regular treatment over a period of years. Finally, there are the mentally defective children with varying degrees of physical handicap. If the I.Q. is below forty the child can not take part, successfully, in even a limited training program. If the I.Q. is between forty and seventy the child will profit from a limited program. Children whose I.Q. is over seventy are most able to respond to a complete program of rehabilitation. Institutional care of the mentally defective case must always be considered, regardles of physical handicap.

Miller and Rosenfeld⁽¹⁾ of the University of Buffalo tested three hundred and thirty cerebral palsied children and reported that fifty per cent had I.Q.s below seventy. Phelps, on the other hand, states that only thirty-five per cent of cerebral palsied children have I.Q.s below seventy⁽²⁾.

Evaluation of the mentality of cerebral palsy children is very difficult, technically, and demands unusual skill and resourcefulness on the part of the examiner. A number of testing methods are used. Among the more helpful are: the Gessell - Amatruda tests and their modifications; the Vineland social maturity scale; and, the Cattell. The skillful examiner can estimate the intelligence of cerebral palsied children with a remarkable degree of accuracy, even those with severe physical handicaps. In those instances where the results of the psychometric examination are doubtful, a trial period of therapy for about six months usually reveals the child's ability to learn.

In estimating the outlook for the cerebral palsied child one must evaluate not only the mental ability but also the nature and severity of physical disability.

The case history in the cerebral palsied child differs, in important respects, from the usual case history. Careful attention is given to the details of birth, neonatal difficulties, and development. We will wish to know whether the birth was considered to be unusual in any way, whether delivery was rapid or prolonged, whether complications were encountered, and, whether or not the baby was born by caesarean section. Evidence of post-natal asphyxia and cyanosis should be sought. The presence of erythroblastosis fetalis should be ruled in or out, if possible. One should inquire about baby's ability to nurse and to swallow, and his gain in weight during the early weeks of life. The physician should ask about the occurence of convulsions; they occur in fifty per cent of spastics, in fifteen per cent of athetoids, and in only five-tenths per cent of all children⁽³⁾. One should determine the age at which the patient learned to hold his head up, to roll over, to reach and grasp, to sit without support, to combine both hands in play, to crawl, to stand, and to walk without support. One should inquire about communication ability, talking, drawing, writing, and hearing. Self-help skills should be explored, the age at which the patient learned to feed himself, to dress himself, and to take care of his own toilet needs. The patient's ability to see is obviously important; it is surprising how often families have a totally unrealistic idea of their child's vision. It is important to know the parent's attitude towards the child and his handicap, and to know the child's attitude. One should attempt to evaluate the home environment as well as possible, since success depends so largely upon cooperation at home.

Physical examination includes an estimate of the child's general appearance, and a measure of his size for his age. The size of cerebral palsied children tends to be smaller than that of normal children of the same age. This is brought about by feeding difficulties, and by wasting large numbers of calories in constant fruitless motion. The circumference of the head should be determined. The child's motor skills for his age should be evaluated. The undue persistence of infantile reflexes should be sought for.

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The tonic neck reflex is elicited by rotating the head, first toward one shoulder, then toward the other. Extension of the limbs on the side toward which the face is turned, and flexion of the limbs on the opposite side, constitute a positive sign. Normally, this sign appears at about four weeks of age, begins to disappear at sixteen weeks, and vanishes before the twentieth week. Bilaterally positive tonic neck reflexes after this age are indicative of organic brain damage. Inequality between the two reflexes may mean asymmetric brain damage. When brain damage is severe these reflexes may persist into adult life.

The Moro reflex usually disappears by the sixteenth week of life. Its persistence indicates organic brain damage.

The grasp reflex usually persists for only eight to twelve weeks from birth. If it remains present beyond this age, organic brain damage is indicated.

Balance, strength, control, coordination, and posture must be evaluated. The presence of spasticity or athetosis should be determined. In cases of long-standing, contractures are likely to be present. An effort should be made to learn all one can about the child's speech, vision, hearing, and manual dexterity. It is important to observe his ability and willingness to respond to instructions.

One should observe the manner in which the legs are moved. The baby of less than one month kicks both legs together; the older child is able to move the legs alternately. Reciprocal leg movements constitute one of the essential prerequisites of walking. The normal child reciprocates by three months of age.

Positive stretch reflexes are pathognomonic of spastic muscles. Typically, a spastic muscle may be put through a full range of motion, passively, if the movement is carried out slowly. If the passive motion is rapid, it is quickly halted by a strong contraction of the stretched muscle. This is the stretch reflex. A patient having tension athetosis may, at first, appear to be spastic but the absence of the stretch reflex may be demonstrated by "shaking the muscles loose." The extremity is shaken rapidly and soon begins to flail in the tension athetoid whereas it becomes more tense in the spastic patient.

The deep reflexes are exaggerated in the spastic child. They are usually normal in the athetoid child. Superficial reflexes are of no diagnostic or prognostic value in cerebral palsy.

It is well to appreciate the fact that, as yet, we have no means of altering the basic pathology in cerebral palsy. Treatment, in the usual case, must consist primarily of training the child to develop as normal a response as possible to a given stimulus. This means that an entirely new reflex arc may have to be developed; and, it is possible to do this only by repeating and repeating over and over again. These new acts must at first be simple, and later, develop into more complex responses. It is frequently necessary to control or abolish the abnormal responses while training and developing new patterns. For example, in teaching a severely involved child to walk, it may be necessary to control the entire limb in a rigid brace while concentrating on hip control. After hip control has been accomplished the therapy is then directed to the knee and the bracing lessened accordingly.

One can readily understand the importance of starting therapy at an early age before abnormal patterns have become too rigidly fixed, and almost impossible to alter. It is extremely important to make an early diagnosis and then to begin training, in an attempt to develop normal patterns at nearly the normal age.

Needless to say it is extremely important to consider the child as a whole and not make the error of concentrating only upon the most obvious deficiencies. The majority of cerebral palsy patients have motor involvement of varying degrees; but many of these also have mental, visual, hearing and neurological pathology as well. Therefore it becomes almost a must that the original evaluation be made in a center where all specialty fields are available. There are very few cases in which the orthopedist, the pediatrician, or the neurologist alone can supply, satisfactorily, the needs of a single patient. One of the most important members of the team is the psychologist because one can not prescribe intelligently without an understanding of the child's mental capabilities. The neurologist must rule out pathological conditions simulating cerebral palsy; and, he will be called on frequently to control seizures, for if the patient is subject to repeated convulsions these will seriously interfere with his progress. Eye and ear consultations are frequent; and often the dentist is needed, also. The orthopedist must be available at all times. However, after all these special examinations, it becomes necessary to organize the information available, and to apply it to the best advantage. As we are handling mostly children, the pediatrician who is trained in cerebral palsy assumes a major role.

Training centers for cerebral palsied children are established in hospitals, such as the Nebraska Orthopedic Hospital, because all of these services are readily available in such an institution.

It has long been known that the physical training of a cerebral palsied child progresses more satisfactorily if the child is receiving, concurrently, schooling in reading, writing, and arithmetic. Conversely the child's schooling goes better if he is receiving physical rehabilitation.

A majority of children with cerebral palsy can be made self sufficient if they are treated adequately. That is, they are able to learn adequate communication, locomotion, and self-help skills. Facilities for accomplishing these ends are fairly well developed in Nebraska. Up to now, very little has been done to teach these people a trade. A few cerebral palsied persons do prepare themselves to earn a living.

There remains, however, a very distressing element that influences profoundly the long term prognosis in cerebral palsied individuals. This is the reluctance, on the part of the public, to accept such persons. For too many years the "spastic" child has been thought of as also being feeble minded. The public does not realize that the percentage of average and above average intellect in cerebral palsy differs but little from that of our total population(4). The clinics in our industrialized sections are reporting difficulty in placing even their most promising students. One can imagine the psychological effect on these individuals who have toiled for years only to find that they are still not employable. We, as physicians, certainly should make every possible attempt to educate the public to a better acceptance of the cerebral palsy victim.

The success of our efforts to rehabilitate the cerebral palsy patient depends, to a very great extent, upon the wisdom, the skill, the devotion, the tenderness, and the perseverence of the therapists who work with the child. The compassionate understanding of every nurse, nurse aide, orderly, dietician, and technician in the hospital-school, is vastly important to the morale of the patient. But, possibly most important of all, more important than doctor, therapist, teacher or nurse, is the mother of the cerebral palsied child. She must have unending patience, divinely inspired faith, and, the ability to be objective about her own child. She must be tender when the occasion calls for tenderness and firm when she should be firm. She must raise her child so that he feels no more self-pity than the child who needs glasses for his eyes or braces for his teeth. Upon her, more than upon any other one person, depends the ultimate success of the program.

In summary, then, the outlook for the cerebral palsied child is infinitely better than it was a generation ago. It depends upon the nature and degree of the handicap, upon the intelligence of the patient, and upon the attitude of the patient and his family toward his problem. The rehabilitation of the cerebral palsied child is an educational process; and its success depends, ultimately, upon the ability of the therapy team to inspire the patient to improve within his physical and mental ability. Like any other educational program, the education of the cerebral palsied child is most successful if started early in life and pursued unceasingly throughout the growing years.

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Pitfalls in Urological Diagnosis

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In this article the author deals with errors. He classifies them and points out which errors are reprehensible. Beginning with the history of the patient he guides the reader on through the physical examination, the laboratory procedures, instrumentation of the urinary tract, and, x-ray technic and interpretation, exposing the vulnerable spots—the possible pitfalls in urologic diagnosis. His discussion leads one to the conclusion that errors due to omission and carelessness are as easy to avoid as they are inexcusable.

EDITOR

It is to be recognized that in any field of human endeavor a certain percentage of error is inevitable. There are the errors of omission, the errors of commission, errors due to faulty interpretation of facts and findings, and errors in judgment. Upon occasions one may be mistaken in being too radical, or, upon other occasions, may seriously err in being too conservative. There are the amusing errors, the exasperating errors and the ghastly errors. And sometimes, although ourselves responsible, we are the helpless victims of errors of others.

Censure is not necessarily deserved for errors in judgment, but there is no excuse for omissions, and no substitute for thoroughness in investigation. Perhaps the greatest "crime" of all, in urological investigation, and in general physical examination as well, is the omission of digital rectal examination, and, equally inexcusable, is the omission of gross inspection of a freshly voided sample of urine.

SYMPTOMATOLOGY

Since a patient does not come in without a complaint, let us first consider the interpretation of symptoms. In order that we may proceed logically, it is exceedingly important to obtain from the patient a precise description of his chief complaint, and each of us knows that to "pry out" this information often requires infinite patience. Instead of stating his complaint, he just must give you a diagnosis. His kidneys are "weak." Or he has trouble with the "prostrated glands." And you are obliged to sit through a tedious and irrelevant recital about what he said and what "Doc" said. It is to be remembered that there is often a tendency to "soft-pedal" the major symptoms, emphasizing, for instance, "rheumatism," and omitting mention of urinary obstructive symptoms.

Two of the most serious errors of omission in connection with symptomatology are (1) failure to regard chronic cystitis as a symptom, and (2) failure to insist upon investigation of unexplained hematuria. For obvious reasons, such omissions are responsible for an incalculable number of tragedies.

It is of prime importance that we remember that chronic or recurrent "cystitis," characterized by varying degrees of urinary frequency and dysuria, is not a disease per se, but is actually a symptom, crying for investigation as to the primary or underlying cause. It may be compared with headache which is a symptom of eye-strain, perhaps, or of intracranial pressure or constipation; and, with abdominal pain which may be a symptom of appendicitis or intestinal obstruction or duodenal perforation or green apples. The cystitis may, therefore, be relieved, not by local treatments, but, by discovery and appropriate treatment of the underlying cause.

Hematuria, particularly unexplained hematuria, unaccompanied by other symptoms, must be viewed as a valuable warning signal. One cannot too severely condemn the neglect of this opportunity. Too often a patient comes in with an advanced vesical or renal new growth. " "Have you ever had bleeding before?" "Yes, seven years ago, but 'Doc' checked it with medicine." You and I know that hematuria is inherently intermittent, and that this medicine was worse than useless by reason of the resulting false sense of security. And we also know that it is now too late to effect a cure.

It is also important to bear in mind the following:

Backache, frequently assumed by the patient to be due to "kidney trouble," usually is caused by something else. Renal pain characteristically is located in the flank, with or without radiation.

Urinary "incontinence" not infrequently is of the so-called paradoxical or overflow type, and is in reality the result of bladder distention, often with a tremendous residual urine. Let us then not make the mistake of assuming that since this patient consistently leaks urine he does not have mechanical obstruction.

Vague unexplained abdominal symptoms may be due to renal calculus or ureteral stricture.

Urinary frequency and dysuria, complained of by old men, by no means necessarily indicate prostatic obstruction, and not infrequently are evidence of ulcerating malignancy.

GENERAL PHYSICAL EXAMINATION

Although we are dealing with a specialty, let us not forget the importance of a general physical examination, with particular reference to the cardiovascular system, serological tests and abdominal palpation.

A grossly distended bladder, because painless when chronic, is often overlooked (even by physician patients), although easily discovered by palpation or percussion, or even by simple inspection. Clinical evidence of pulmonary tuberculosis may explain urinary frequency upon the basis of renal tuberculosis. And let us not forget the importance of bimanual flank palpation; also that bilateral flank masses usually mean polycystic kidney disease.

URINALYSIS

Without attempting to discredit the importance of routine albumin and sugar tests, it should be made clear that, from a urological diagnostic angle, we are interested primarily in the presence of pus cells, red cells and bacteria, in a freshly voided or catheterized sample. I emphasize freshly voided, because urine, in a warm room, is an excellent culture medium. And, to exclude urethral contamination, we must insist upon a second glass sample from the male and a catheterized sample from the female. Fresh cover-slip preparations and methylene blue stained smears of the centrifuged sediment should be examined. Points to be remembered are:

1. A grossly cloudy urine is by no means necessarily a purulent urine, as may be determined by acidification.
2. Glycosuria should be checked by repetition and by blood sugar determination, before making a diagnosis of diabetes.
3. A negative urinalysis by no means necessarily excludes uremia, and should be checked by blood nitrogen determination. A patient on the verge of uremia may void a perfectly clear and albumin-free urine.
4. Sterile pyuria (that is the absence of ordinary bacteria in the methylene blue stain) is strongly suggestive of tuberculosis.

Finally, if we remember that the clear and sparkling urine sample, if carefully centrifuged and examined under the microscope, might show a few RBC, there would be fewer appendectomies to cure ureterolithiasis.

EXTERNAL GENITALIA

A casual glance at the external genitalia may give the clue to the diagnosis. More than one case has come to my attention in which prostatectomy has been advised, and in which detailed investigation demonstrated no lesion other than a very tightly constricted phimosis, with symptomatic relief following circumcision. Other patients referred for prostatectomy have been found to have stenosis of the meatus, or acute gonorrheal urethritis and prostatitis. Any of these errors could have been avoided by casual inspection.

There is a great deal of valuable information to be obtained by careful palpation of the scrotal contents. In view of the vicious character of tumors of the testicle, the saddest error in connection with scrotal palpation is to ignore the possible significance of any unexplained, painless, scrotal mass. All masses related to the testicle should be viewed as malignant until proven otherwise. An indurated (slate-pencil) vas, together with painless induration of the epididymis is suggestive of tuberculosis. Painless, chronic, nodular induration of the epididymis is suggestive of tuberculosis and, if associated with spontaneous sinus formation, is pathognomonic.

Socalled "acute orchitis" (excepting that of mumps), almost always is, in reality, acute epididymitis.

RECTAL EXAMINATION

In making a rectal examination, it is a mistake not to realize the importance of minimizing discomfort to the patient, thus obtaining better cooperation and more satisfactory results. This procedure is best carried out with the patient standing, bent forward, and widely separating the gluteal folds with his hands until the well lubricated finger has been slowly inserted beyond the second interphalangeal joint. The patient then places his elbows on his knees.

Relaxation of the sphincter ani suggests tabes. By careful palpation one may recognize and distinguish between normal prostate, acute or chronic prostatitis, prostatic abscess, hypertrophy, or carcinoma; also between cancer of rectum, and infiltrating malignancy of base of bladder.

It is extremely important to remember: that a full bladder may give misleading information as to the size of the prostate; that the induration of acute prostatitis simulates that of malignancy; also, that, with prostatic abscess, the characteristic feature, usually, is induration rather than fluctuation. The most common error, however, due to failure to realize that prostatic hypertrophy may be intravesical, as well as infravesical, is to assume that the prostate is not responsible for obstructive symptoms because there is no palpable enlargement per rectum. We must not forget that a pedunculated, intravesical, median prostatic lobe, not palpable per rectum, may overhang the vesical orifice and exert ball valve action. Nor is it possible to palpate, per rectum, an obstructing prostatic median bar, or, a fibrous contracture of the vesical orifice.

URETHRAL INSTRUMENTATION

In urethral instrumentation we place emphasis upon the two words cleanliness and gentleness. We cannot achieve asepsis because, although we may boil the instrument and wear sterile gloves, we cannot boil the urethra. We can, however, avoid trauma, and thus minimize the infection-hazard. It is well to remember that a forceful attempt at urethral instrumentation, causing a false passage, may result in one of the most serious and acute surgical emergencies known. I refer to urinary extravasation, rapidly fatal without liberal drainage and suprapubic diversion of the urinary stream.

Catheterization, usually accomplished with a soft rubber catheter, serves four purposes:

1. Determines amount of residual urine, if preceded by voluntary effort.
2. Excludes stricture.
3. Provides a sample for examination.
4. Relieves symptoms, if bladder distended.

It is a very common erroneous assumption that the prostate is non-obstructing merely because the soft rubber catheter passes easily. The use of a stylet, even with a hollow-tipped catheter, is extremely hazardous. In difficult urethral instrumentation, a guiding finger in the rectum often is very helpful. A Coude (elbowed) woven flexible catheter often passes where the ordinary rubber catheter fails.

CYSTOSCOPIC EXAMINATION

Let us not forget that the essence of cystoscopic examination is interpretation; that accuracy in interpretation depends upon experience; and, that there is no substitute for experience. I do not presume to set up criteria as to who is or is not qualified, but the fact remains that, in general, the patient does not fare so well in the hands of the occasional cystoscopist, any more than with the general practitioner who indulges in an occasional laparotomy.

An intravesical prostatic lobe, or even the collapsed wall of an incompletely filled bladder may be mistaken for new growth. Trabeculation of the bladder wall due to hypertrophied muscle bundles and indicating chronic obstruction, may be a cause for bewilderment, and its significance missed. There is, often, doubt in distinguishing between the ulceration of malignancy and that of tuberculosis; and, so-called Hunner or submucous ulcer is usually overlooked, even by the expert cystoscopist, hence the term "elusive ulcer." The same applies to small papillomata. An air bubble in the dome of the bladder may confuse the novice. It is to be remembered that the ordinary right angled vision cystoscope has a "blind spot" directly ahead, and in line with the shaft of the instrument. A full armamentarium includes foroblique and retrograde vision telescopes.

X-RAY

Indispensable as the x-ray has come to be, implicit reliance upon the film alone, unsupported by other evidence, is fraught with danger. Misinterpretation is exceedingly common. Either the presence or the absence of calcareous shadows may be misleading. In cases of suspected ureterolithiasis, extra-ureteral shadows (phleboliths or calcified glands) may closely simulate ureteral calculi, and must be identified by stereoscopic or two-angle films made with an opaque ureteral catheter in place. On the other hand, in cases of known ureterolithiasis (subsequently proved by obtaining the actual calculus), even a good film not infrequently shows nothing, because the calculus is too small, is non-opaque, or is viewed edge-wise, is superimposed over a bony shadow, or perhaps, because the film was not placed low enough to include the lowermost ureter. Calcified glands, gall stones, calcified myomata and calcified arterial walls may be confused with renal or ureteral calculi. Under these circumstances, we are aided by urinalysis, wax-tipped ureteral catheterization and pyelography.

Large calcareous shadows in the region of the kidney are not renal calculi until proved so by pyelography, stereoscopic if necessary. Soft tissue flank shadows must not be overlooked or misinterpreted, and there will be fewer errors if such evidence is supported by pyelography. Obliteration of the border of the psoas-shadow upon one side is suggestive of perinephritic abscess. Upright, and lateral, and oblique films are helpful.

Upon more than one occasion I have known the shadow of a normal bladder full of urine to be diagnosed as a large tumor filling the pelvis.

Mis-labeling of film as to right and left is always a possibility.

URETERAL CATHETERIZATION

I was told once about a Vienese surgeon who had never failed to catheterize a ureter. Either he had attempted only a few, or else . . . Here, again, is where experience and practice count, but we all have occasional difficulty, due either to failure to locate the ureteral orifice (in the presence of severe inflammatory reaction), or, to failure of the catheter to pass more than a fraction of the length of the ureter. In the latter event, the common error is to make a diagnosis of ureteral stricture, whereas this is by no means necessarily the case, and, in fact, usually is not. The more plausible explanation is that the catheter tip, while traversing a curve, has "stubbed its toe" against a fold of redundant ureteral mucosa. The most reliable criterion in the diagnosis of ureteral stricture is resistance or "hang" upon withdrawal of the ureteral catheter or bougie.

By reason of possible error due to temporary urinary suppression, plugged ureteral catheter, or drainage around the catheter, phenolsulphonephthalein-evidence of a functionless kidney must be checked by repetition, unless supported by other clinical findings.

PYELOGRAPHY

It must be recognized that intravenous pyelography, although an exceedingly valuable procedure, by no means supplants the retrograde method; the truth is that one supplements the other. Where one fails or leaves doubt, the other may succeed, or confirm. As determined by judgment, based upon findings in the individual case, either one or the other method may be adequate, or both may be necessary. Were I limited to one, I should choose, by all means, the retrograde route. Intravenous pyelography should be viewed primarily as a "scout" procedure, and the findings, unless conclusive, confirmed by ureteral catheterization. Failure to visualize diodrast secretion upon one side or the other, by the intravenous method, is by no means to be interpreted as proof of a functionless kidney and justification for nephrectomy. Too many times this has been disproved by a retrograde check.

Pyelographic and ureterographic interpretation is a matter of experience and judgment. A supposed filling defect, due in reality to incomplete filling, or a blood cot, may result in an erroneous diagnosis of kidney tumor. So-called ureteral "kinks" are often of fancied, rather than real, significance, and ureterographic evidence of stricture is often due merely to a ureteral peristaltic wave.

The upright, as well as the prone, pyelogram is important, as is the determination of the emptying time of the renal pelvis in cases of suspected nephrotosis, with or without evidence of uretero-pelvic obstruction.

TREATMENT

Although this is primarily a discussion of diagnosis rather than treatment, I take this opportunity to emphasize, by repetition, the importance of investigation of the symptom "cystitis," with a view to the discovery and removal of the primary or underlying cause; and, to point out the hopelessness of attempting to cure, by bladder irrigations, a cystitis secondary (for instance) to pyonephrosis.

And, with respect to prostatic surgery, whereas there are many instances of relatively minor obstructive symptoms in which there is no immediate surgical necessity, one cannot too strongly condemn the error of condoning delay, and of failing to provide bladder drainage, in instances of large residual urine.

ERROR OF OTHERS

In hospital practice, although ourselves responsible but helpless, we may be the innocent victims of the errors of others. The wrong or right medication or treatment may be administered to the right or wrong patient. There may be errors in dosage, possibly resulting from misinterpretation of orders, or from carelessness, or forgetfulness. I have even known the wrong patient to be wheeled into the operating room, lying face downward in preparation for caudal anesthesia. Fate, with diabolical cleverness, too often contrives to enact the unforeseen and the impossible.

With respect to solutions employed in operating and cystoscopic rooms, it has long been my practice to have the nurse read aloud the bottle label as she pours. This is a

(Continued on page 279)

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THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

STUDY OF MILITARY DEPENDENT MEDICAL CARE BEING MADE

As reported to you in Bulletin No. 5, May 4, 1953, the Defense Department has appointed a commission to study the entire subject of medical care for the dependents of military personnel. The commission recently concluded a two-day session in which it heard testimony from thirty witnesses and is now preparing its recommendations. After receiving the report, the Secretary of Defense may suggest certain policy procedures for adoption by the Congress.

Dr. Walter B. Martin, a member of the American Medical Association Board of Trustees, was one of those who testified. He said the A.M.A. is strongly in favor of the question of responsibility for military dependent care being determined by Congress and not by administrative interpretations. During his testimony, Doctor Martin also brought out the following points:

1. Government hospitals have expanded residency and intern training programs to such an extent that they are now competing with civilian hospitals for both personnel and patients.

2. This expansion is causing wasteful duplication which threatens civilian training programs.

3. Under present condition, doctors are being drafted to care for civilian patients.
4. Present medical care programs for military dependents are based on a "very slender foundation of law" which dates back to congressional action of 1884.

Dr. Richard Meiling, dean of the Ohio State University College of Medicine and former assistant to the Secretary of Defense for medical and health affairs, also testified. He declared that funds for medical care of military dependents have for many years been a "hidden item" of the various military budgets. He recommended two different solutions to the military dependent problem:

1. Dependent medical care at sliding rates, established by the Budget Bureau, be provided at military installations where medical services were available and staffed.

2. Care to dependents through channels with payment through such voluntary programs as Blue Shield and Blue Cross.

THE WHO AND WHAT OF MEDICINE

The favorable disposition made by the American people on the issue of socialized medicine was undoubtedly based on the combined facets of the program the medical profession developed in its campaign against federal control of medical services. Leaders in this fight have stated repeatedly that the issue was resolved when the average citizen became fully "informed" on the subject.

One of the primary tenets of this educational campaign was the distribution of literature to physicians' offices. The effectiveness of the plan can be measured by the multi-million pieces of literature which were placed in the offices of physicians and there read by inquiring patients.

Your Public Relations Committee feels that it is now equally important to keep your patients informed on what the profession is doing and what its thoughts are regarding health and socio-medical economic problems. The members of this active committee are of the opinion that if the gains that have been made in recent years are to be maintained and strengthened, it is essential that every effort be made to continually acquaint the people with what their doctors are accomplishing on behalf of their health.

To this end, your committee has sent every member of the association a special bulletin on office literature available, with space on the back side for ordering these materials. If you have not yet completed your order blank, you are invited to do so at your earliest convenience. In the event you have misplaced this bulletin, following are titles of the literature which may be secured immediately by writing to the Nebraska State Medical Association, 1315 Sharp Building, Lincoln 8:

1. "A Doctor As Near As Your Telephone."
2. "A Doctor for You."
3. "Dr. Bauer's Presidential Address."
4. "Revolution at Hickory Nut Gorge."
5. "Small Business and Health."
6. "Socialized Medicine Is No Bargain."
7. "The AMAzing Story."
8. "The Doctors Clean House."
9. "The Voluntary Way Is the American Way."
10. "Voluntary Health Insurance —the American Way."
11. "What About This Doctor Shortage."
12. "Your Money's Worth in Health."

Your Public Relations Committee hopes that every physician in the state will avail himself of this fine reading material. The committee feels quite certain that most patients will support their doctors if they know enough about the "who and what of medicine."

News and Views

The following quotation taken from Report of American Medical Education Foundation, which was presented to the House of Delegates of the American Medical Association by President Elmer L. Henderson, on June 1, 1953, should be a matter of interest and pride for Nebraska doctors:

". . . . Indiana, Pennsylvania, Nebraska and Colorado also did outstanding work in their campaigns. Nebraska was perhaps the outstanding state effort, despite the fact that Indiana led them in both dollars and total contributors. Under the leadership of Dr. L. D. McGuire of Omaha, in a thirty day period, Nebraska raised $49,146 in cash and obtained almost $33,000 in pledges, payable over the next two years by the personal contact system. This, from a state having a doctor population of 1,300 is certainly proof positive that if the Foundation's program is taken to the doctor by the leaders in his profession, he will respond. It also leaves little doubt that the doctor wants to keep the medical schools academically free and financially solvent."

The Division of Hospital Facilities of the Department of Health Education and Welfare reports that a Hill-Burton grant of $250,000 has been approved for the construction of a new school of nursing at the Immanuel Hospital in Omaha. Total cost of the building will be $500,000, of which the hospital will pay half.

According to the Division of Hospital Facilities, Nebraska has now received $3,267,641 in Hill-Burton funds for twenty-nine separate projects which cost a total of $11,112,119. These projects supplied the state an additional 579 beds. In addition, there are now six projects under construction at a cost of $3,069,936, including federal contributions of $1,158,424, and are designed to supply 183 more beds.

Editorial from The Fairbury News:

"Once in a while there will be a story in the papers about some community advertising for a doctor to locate there so that people of the vicinity will have medical care close at hand. In some circles such stories have led to the belief that medical education is lagging and is out of pace with the needs of the times — and that the only solution is a vastly extended system of government grants and subsidies.

"The American Medical Association has now published a 'Factbook on Medical Education' which does a first-class job of refuting that idea.

"As the booklet's title implies, it is full of factual data concerning the medical education system as it exists today. It deals with the experience during the 1951-1952 school year as contrasted with prior periods. A summary of the facts is given in these words: 'Medical education, during the academic year of 1951-52, recorded these accomplishments: The largest medical school freshman class in history. The largest graduating class, while on regular schedules, in history. The greatest increase in teaching facilities in history. The best financial support of medical schools in history.' It also points out that medical education is more than keeping up with population changes — from July, 1942 to July, 1952, the population increased 16.4 per cent while medical school enrollments jumped 22.8 per cent.

"In short, the nation is getting more doctors and extremely well educated doctors. This is one more example of how our medical care problems are being solved without resorting to socialized medicine."

From The Omaha World-Herald:

The American Medical Association is becoming alarmed at the fact many hospitals are closing their staffs to the general practitioner. That word came in mid-May when Dr. Edward H. Leveroos, Assistant Secretary of the American Medical Association's Council on Medical Education and Hospitals, spoke to the faculty and students of the University of Nebraska College of Medicine in Omaha.

He said that barring general practitioners from hospital staffs "is not a healthy situation for the medical profession." The council feels, he added, that a physician's skills should be the determining factor as far as hospital privileges are concerned.

"Whether or not he is a specialist should have nothing to do with his membership on hospital staffs," Doctor Leveroos declared. He said the solution is for hospitals to establish general practice sections. "There the general practitioner could have a status comparable to his specialized colleagues . . . He would have the sole responsibility for organizing and setting up an educational program that is geared to the general practitioner."

These sections, he continued, should be organized as completely as any other section in the hospital and should not be mere clinical services.

From The New York Times:

After nearly five years of free medical and health service for the people of Britain, the Conservative Government has decided to institute an independent inquiry into the cost and efficiency of nationalized medicine, Iain MacLeod, Minister of Health, announced recently in the House of Commons.

The committee of inquiry, he said, will review the "present and prospective cost" of the health service and will seek means, "whether by modification in organization or otherwise," of obtaining the best value for the money spent and of preventing an increased burden on the exchequer.

Mr. McLeod's announcement drew a vehement protest from Aneurin Bevan, Minister of Health under the former Labor Government, which inaugurated the nationalized system in July of 1948.

Mr. Bevan charged in the House that the question the Government was actually referring to the committee was "whether there should be any longer a free health service."

From The Lincoln Journal:

Nearly 37,000 doctors contributed more than $3,150,000 in direct support of medical education in the United States last year, according to the American Medical Association. The total was exclusive of amounts given for buildings, endowments, scholarships, research and other special purposes.

From The Omaha World-Herald:

Nebraska communities have built 66 hospitals and medical units since the end of World War II. Three more are in or near the construction stage. Thirty-four units were built under a federal aid program in which the government paid about one-fourth the total cost. The other 32 units were built entirely by private funds.

In 1946 a State Hospital Advisory Council was set up to plan a statewide hospital building program. Each community was rated as to its needs for medical facilities. The size of the facilities completed thus far range from a 12-bed hospital at Callaway to a 75-bed hospital at West Point.

Two of the biggest projects are due in the future. They are the Psychiatric Unit to be located on the University of Nebraska College of Medicine campus and the College of Medicine improvement program.

Federal funds allocated to Nebraska for the 34 grant-in-aid units totaled $4,783,430. Local sponsors added another $12,000,000.

A nationwide survey by the Medical Economics magazine indicates that the average U. S. physician spends 12 per cent of his working time on patients who cannot pay. The dollar value of this work is estimated at more than $3,000 a year per doctor. According to the survey, seven out of 10 doctors do some work they do not expect to be paid for. Physicians in the large cities and those with high incomes do more of this charity work than do physicians with less earning power.

In writing and in speaking, physicians and others in the health field often refer to the total membership of the American Medical Association. The figure quoted often ranges all the way from 125,000 to 160,000. Since the total figure is used and referred to so often it might be well, for the sake of uniformity, to adopt a round number, thereby avoiding confusion in the public's mind.

The correct figure, based on the December 31, 1952, records of the A.M.A., is 140,000 broken down in this manner:

126,000—active members, including those exempt from paying A.M.A. dues.

9,000—service members (full-time commissioned officers in the regular Army, Navy, Air Force, U.S. Public Health Service, Indian Service and Veterans Administration).

5,000—associate members (physicians who hold a type of membership that does not give them the right to vote or hold office).

From a Wire Service release:

The Army henceforth will use Dextran, a substance made from sugar, instead of blood plasma for all requirements at home and overseas, it was announced during the middle of May.

An authoritative Army medical source said "a complete switchover" to the plasma substitute has been put into effect following tests on Dextran in continental and combat area hospitals. This spokesman said a major factor in the switch to Dextran was that use of plasma entails a "high risk" of causing a disease known as serum hepatitis. Dextran is entirely free of the hazard.

The Army official said that supplies of plasma already stockpiled in overseas theaters will be used up on certain kinds of cases where plasma gives better nutritional support. But he added that a blood fraction known as "serum albumin" can also give this nutritional support and efforts are already started to increase the Army's supply. Albumin is also free of the hepatitis danger, he said.

The following is a record of the outcome of the Sporting Events which took place on May 11, 1953 at the Annual Session of the Nebraska State Medical Association:

SPORT EVENTS—NEBRASKA STATE MEDICAL ASSOCIATION MEETING

May 11, 1953

TRAP SHOOT

O'Brien Trophy Shoot (50 rocks at 16 yards):
  Harry Flansburg (46), O'Brien trophy, bourbon
  Frederick Hill (45), Thermo-glass set
  Fritz Teal (43), Sport shirt
Munger Trophy Shoot (50 rocks at 25 yards):
  J. Ritter (40), Munger trophy, bourbon
  Harry Flansburg (38), Bourbon
  Doctor Carey (35), Bourbon
Backup (25 yards, 10 rocks):
  Frederick Hill (7), Sun glasses
  Henry Lehnhoff (7), Sun glasses
  William Sucha (6), Gun holder
  J. Ritter (6), Shell case
Backup (16 yards, 10 rocks):
  J. B. Christensen (8), Ham
  F. A. Mountford (8), Bacon
  D. F. Milam (8), Ronson lighter
  L. W. Lee (8), Barometer
Free for All (16 yards, 25 rocks):
  John Deering (21), Bourbon
  James Bradley (12), Ronson lighter
  George Loomis (13), Sun glasses
Last Man to Arrive for Trap Shoot:
  Ralph Moore, Shaving kit
Most Interested Spectator:
  J. P. Tollman, Sun glasses
Best Dressed Shooter:
  Joe David, Stethoscope
Best Effort:
  Leslie Sauer, Duck call

Bourbon and Scotch for All Shooters,
Courtesy W. A. Piel Co.
— Door Prizes for Many —

GOLF

18 Hole Low:
  Jack A. McMillian (77), Mutual Benefit trophy and bourbon
  H. V. Knosp (81), Bourbon
  J. H. Judd (82), Bourbon
  W. A. Cassidy (85), Golf balls
  J. J. Keegan (86), Bourbon
18 Hole High:
  Robert Long (113), Stethoscope
9 Hole Low:
  Maurice Grier (50), Club covers
  Werner Jensen (51), Golf balls
9 Hole High:
  C. A. Rydberg (61), Stethoscope
Flag Shots:
  H. E. Mitchell, Golf bals
  Paul Peterson, Golf balls
  Leonard Chadek, Golf balls
  G. A. Young, Jr., Golf balls
  J. J. Keegan, Golf balls
Best Dressed Golfer:
  Earl Sage, Golf balls
First Golfer to Arrive:
  Robert Lovgren, Barometer

Door Prizes for Many

Announcements

The National Gastroenterological Association has made a preliminary announcement of its fifth annual course in postgraduate gastroenterology. This will be held at the Hotel Biltmore, Los Angeles, Calif., October 15, 16 and 17, 1953. Communicate with Daniel Weiss, Executive Officer, National Gastroenterological Association, 1819 Broadway, New York 23, N.Y. (Approved for credit by A.A.G.P.)

An International Symposium on the Dynamics of Virus Infection will be held under the auspices of the Henry Ford Hospital, in Detroit, Mich., October 21, 22 and 23, 1953.

It may be of interest to some of our readers to know where they may turn to find certain items of medical literature that are difficult to come by. The American Library Service of 117 West 48th Street, New York 36, N.Y., specializes in out-of-print and hard-to-find books and other literature on all subjects in any language. There is no charge for calling on their "search service."

PR INSTITUTE SET FOR SEPTEMBER

Outstanding postgraduate courses in medical public relations will be offered at the AMA's second Public Relations Institute for all state and county PR personnel. "Classes" will convene September 2 and 3 at Chicago's Drake Hotel.

Topics such as medical forums presented by medical societies in cooperation with local newspapers and tips on how to conduct successful public relations programs on limited budgets will be discused by authorities in the field. In addition, emphasis will be placed on the use of television as a PR medium. Specially-filmed shows available for use by local medical societies will be given a preview at the Institute.

Coming Medical Events

ROCKY MOUNTAIN CANCER CONFERENCE, July 8 and 9, 1953, Denver, Colorado. Mr. Harvey Sethman, 835 Republic Building, Denver 2.

POSTGRADUATE COURSE IN ENDOCRINOLOGY, September 22, 23 and 24, 1953, University of Nebraska College of Medicine, Omaha. Elton Newman, M.D., University of Nebraska College of Medicine, 42nd and Dewey Avenue, Omaha.

NEBRASKA STATE MEDICAL ASSOCIATION REGIONAL POSTGRADUATE CIRCUIT COURSES, September 28, 29, 30, October 1, 2, 3, 1953. (Towns to be announced later).

COLORADO STATE MEDICAL SOCIETY 83RD ANNUAL SESSION, September 29 - October 2, 1953, Denver, Colorado. Mr. Harvey Sethman, 835 Republic Building, Denver 2, Colorado.

OMAHA MID-WEST CLINICAL SOCIETY 21ST ANNUAL ASSEMBLY, October 26-30, 1953, Hotel Paxton, Omaha, Nebraska. Miss Irene Rau, 1036 Medical Arts Building, Omaha 2, Nebraska.

CRIPPLED CHILDREN'S CLINICS—
July 11, Norfolk, State Hospital
July 25, McCook, St. Catherine Hospital
August 8, North Platte, Knights of Columbus Bldg.
August 15, Chadron, Elks Club.
August 29, Hastings, Mary Lanning Hospital.
September 12, Broken Bow, High School
September 26, Kearney, Good Samaritan Hospital

NEBRASKA STATE RADIOLOGICAL SOCIETY—
October 21, Veterans Hospital, Lincoln.

News from Our Medical Schools

AUDIO-VISUAL SYSTEM

As part of its audio-visual program, the Creighton University School of Medicine is subscribing to the Library of Congress system of cataloguing medical films and film strips. Under this program the Library prints 3x5 catalog cards containing pertinent and up-to-date information about audio-visual material that is similar in content to those the Library provides for books.

Because these cards may be cross-indexed under many headings, such as title, subject matter, producer, author and department within the school, they will be an invaluable aid in the school's teaching program. The problem of having to consult several catalogues for audio-visual material will be solved when the card system is complete. It will provide a comprehensive, compact classification of medical motion pictures and film strips.

The catalogue contains more information than is available in the average list of film titles. Though the Library of Congress does not evaluate the films, the cards do contain a bibliography of reviews. Other pertinent information contained in the system tells the type of film or filmstrip, whether it is black and white or in color, sound or silent, length of running time, summary of film's content, type of audience and lists the medical advisors who collaborated on the material.

Only by the discovery and treatment of the early case can the ultimate conquest of tuberculosis be effected. Mass x-ray surveys have contributed immeasurably toward this end. At the same time the number of new-found cases, coupled with the decided decrease in the disease mortality rate, has created an increased need for additional beds. That need has now reached alarming proportions and constitutes a major problem in tuberculosis control. (J. Winthrop Peabody, M.D., J.A.M.A., December 13, 1952).

In Memoriam

ANDERSON, EDGAR E.	Lyman	December 8, 1952
ATTWOOD, NORMAN H.	Omaha	December 9, 1952
BYERS, ROBERT C.	Fremont	November 8, 1952
CASE, J. D.	Lincoln	March 31, 1953
CAULK, WM. H.	Lincoln	December 29, 1952
COPELAND, C. C.	Beaver City	June 18, 1952
DANSKY, NATHAN	Omaha	February 25, 1953
DAVEY, R. W.	Roca	July 28, 1952
DAVIS, WM. WINDLE	Omaha	January 3, 1953
DAVIS, JOHN DWIGHT	Genoa	December 15, 1952
EDSTROM, ANDREW J.	Stromsburg	June 21, 1952
EVANS, J. NORTH	Columbus	November 5, 1952
EWING, BEN E.	Nebraska City	December 28, 1952
FOX, CLARENCE P.	Morrill	November 10, 1952
FRANCIS, HARRY W.	Bancroft	May 24, 1952
GERIN, EDWARD T.	Norfolk	December 21, 1952
GERISH, ALBERT E.	Omaha	March 28, 1953
GRIOT, GEORGE A.	Chadron	April 29, 1953
GRODINSKY, MANUEL	Omaha	March 31, 1953
HALL, B. W.	Omaha	February 2, 1953
HAYS, EDWARD R.	Falls City and Omaha	September 8, 1952
HILSABECK, L. CLYDE	Gretna	May 15, 1952
HODAM, J. A.	Filley	July 17, 1952
JENSEN, J. P.	Plainview	April, 1953
LEHNHOFF, HENRY J., SR.	Lincoln	December 16, 1952
LOFFLER, GILBERT D.	Lincoln	February 3, 1953
LURVEY, HOMER D.	Hay Springs	November 12, 1952
MEESE, L. D.	Sutton	August 23, 1952
MURPHY, FRANK P.	Omaha	March 23, 1953
NILSSON, JOHN R.	Omaha	December 4, 1952
PEEBLER, ORA F.	Omaha	June 14, 1952
PELIKAN, CHARLES C.	Lincoln	January 19, 1952
PLEHN, FRANK W.	Scottsbluff	August 24, 1952
PUGSLEY, G. W.	North Platte	August 3, 1952
POLLARD, CHAS. W.	Peru	May 19, 1952
RICHARDS, B. F.	Crawford	June 25, 1952
RORK, L. W.	Hastings	December 23, 1952
ROSENBERG, DAVID S.	Franklin	March 15, 1953
SIXTA, L. H.	Columbus	December 16, 1952
SLUSSER, FRANK B.	Polk	December 29, 1952
STASTNY, OLGA	Omaha	August 21, 1952
TAYLOR, C. E.	Sargent	May 29, 1952
TURNER, JAMES W.	Sterling	March 16, 1953
URIDIL, CREIGHTON F.	Hastings	November 1, 1952
WORTHMAN, A. V.	Curtis	February 25, 1953
YOUNG, ALEX J.	Omaha	September 25, 1952

REPORT OF PREPAYMENT MEDICAL CARE COMMITTEE

During the past year the Prepayment Medical Care Committee has attended all of the board of directors meetings of the Blue Shield organization. The financial condition of the plan is ever improving and the plan is in the able hands of a group of public spirited physicians and businessmen who give of their time and efforts without remuneration.

During the year a new policy has been written. The purposes of this policy are the equalization of certain sections, the correction of errors which have become apparent, the increase in the reserves of the company in the interest of a more sound organization, the liberalization of allowances, and the increase in income limits for eligibility of service coverage from $1,800.00 per year for single members and $2,600.00 per year for a family, to $2,600.00 per year for single members and $3,200.00 per year for a family.

As a result of this change in income limits, it became necessary for the plan to enter into a new contract with participating physicians. Not all of the physicians in the state who had previously signed were willing to sign again. Your committee felt that inasmuch as the change in policy had been recommended by the Nebraska State Medical Association this same committee should continue to carry the ball and urge every member of the society to sign. Accordingly, the following letter was sent to those who had signed:

> "It has been called to the attention of the Prepayment Medical Care Committee of the Nebraska State Medical Association that the Amendment to your Participating Physicians Agreement has not been received by the Blue Shield Plan. Since you may have misplaced the amendment first sent to you, I am enclosing another form which I hope you will wish to sign. I am advised that a new roster of participating physicians will soon be published by the Blue Shield Plan, and if you will sign and return one copy to Nebraska Medical Service by December 15, 1952, your name can still be included in this new listing. All but a small percentage of the original group of participating physicians have already signed this amendment.
>
> "As you perhaps recall, the House of Delegates of the Nebraska State Medical Association passed the following recommendation:
>
> > 'Since the inauguration of our prepayment medical plan, inflationary influences have rendered our income limits of $1,800 for a single member and $2,600 for a family unrealistic. In order to bring our income limits in line with present economic conditions, it is proposed that the income limits be raised from $1,800 to $2,400 (annually) for single persons, and from $2,600 to $3,200 (annually) for families.'
>
> "The House of Delegates and the Prepayment Medical Care Committee urgently request that every participating physician of the Nebraska Blue Shield Plan amend his agreement to the higher income limits so that service benefits will be available to enough of the people to make the service feature of their plan really effective. Continued cooperation on the part of all participating physicians will enable our Blue Shield Plan to keep pace with present-day conditions.
>
> "In case you do not wish to participate on the basis of the new income limits, I would very much appreciate your writing to me to express your views in this regard.
>
> Sincerely yours,
> ORVIS A. NEELY, M.D.,
> Chairman, Prepayment Medical Care Committee.

The response was very gratifying, although a few who did not care to sign wrote letters of explanation. Some of their reasoning seemed very logical from the standpoint of their specialty or location and they were not further urged.

Nebraska organized medicine can be very proud of its Blue Shield organization as its schedules and contracts represent the efforts and wishes of the doctors of the state more than do those of any other state Blue Shield organization in the country.

In some states there are several Blue Shield and Blue Cross organizations, each working against the other and each sparring for recognition by the medical association. In Nebraska there is only one Blue Shield. Its board, by constitution, contains a majority of physicians in its membership. The physician members are recommended by the president of the medical association, and the liaison committee of the state association represents the association at its board meetings. This committee receives complaints and criticisms from the members of the medical association, transmits them to the Blue Shield organization and brings the complaints and criticisms from Blue Shield to the profession.

Blue Shield, in the United States, has made phenomenal strides forward in its development in the past ten years, but in spite of this, great caution must be exercised in venturing into new fields of risk.

Among the things which have been urged by your committee have been the eventual adoption of a policy whereby the Blue Shield fee schedule will, insofar as possible correspond with the relative values of the proposed schedule for governmental agencies of the state medical association, at the same time fully realizing that some items appearing in this schedule are not, and will never be in any sense of the word, insurable. The point that we have made, and with full acceptance, has been that the doctors themselves in their own schedule are in a better position than any other group to determine the relative value of two different medical or surgical services, and where two services are insurable with equal risk, this relative value should be placed on the two services.

Sound business practices do not permit too rapid experimentation into new fields of health insurance, and, as pointed out in previous years, such new ventures must meet the approval of the State Insurance Commissioner.

Blue Shield in Nebraska — unlike many other states — covers medical service only, while Blue Cross is limited to hospitalization.

We of the committee, working more closely with Blue Shield, have been very concerned about abuses of both plans by some of the doctors. Our attention has probably been called only to some of the more glaring abuses. Undoubtedly many little infractions occur at frequent intervals but most are probably due to blindness as to the real objectives of Blue Cross and Blue Shield, which blindness can only lead to increasing costs to the members and thus defeat the primary purpose of the plans.

The purpose of Blue Shield, as pointed out by Elden Baumgarten, is "not to assure every doctor's fee for every service he renders or to insure him against bad debts." It is simply this: "To assure Mr. and Mrs. Average American and their children adequate medical care at a price they can afford."

ORVIS A. NEELY, M.D., Chm.,
Lincoln,
H. A. JAKEMAN, M.D., Fremont,
JOHN BRUSH, M.D., Omaha.

PROCEEDINGS OF HOUSE OF DELEGATES OF ANNUAL SESSION, NEBRASKA STATE MEDICAL ASSOCIATION

May 11, 1953

The first meeting of the House of Delegates was held in Parlor C, Hotel Paxton, Omaha, Nebraska. Roll call showed 32 members present.

The meeting was called to order by Dr. J. D. Bradley, Speaker of the House of Delegates at 2 p.m.

The report of the Committee on Credentials was read by Dr. R. B. Adams, Secretary-Treasurer, as follows:

"To: The House of Delegates:

"The Credentials Committee met and examined the credentials as sent in by the county societies and recommends to the House of Delegates that the list made from the credentials be accepted as the official Roll Call of the House of Delegates.

R. B. Adams, M.D.,
E. E. Koebbe, M.D.,
L. W. Lee, M.D."

A motion was made and seconded that the report be adopted. The motion carried.

The minutes of the last session were called for by the chair. Dr. R. B. Adams stated that inasmuch as they had been published it would facilitate and speed up the work of the House if a motion were made that the reading be omitted.

A motion was made that the reading of the minutes be dispensed with and they be approved as published. The motion was seconded and carried.

Doctor Bradley asked Dr. Fritz Teal, Vice Speaker, to take the chair in order that he might address the House.

Doctor Teal gave the permission of the floor to Doctor Bradley who welcomed the delegates.

"Mr. Speaker, Delegates to the Eighty-fifth Annual Session of the Nebraska State Medical Association:

"Welcome.

"It is indeed encouraging to see a good many new faces in the assemblage, as it brings out the fact that the younger men are showing a growing interest in organized medicine. I am, also, happy to see so many familiar faces—those who have carried the load of the association for a good many years. This is the third year I have had the privilege of presiding over this House of Delegates and I have enjoved every minute of it.

"For the information of the new delegates, and perhaps to refresh the memory of returning delegates, I should like to dwell briefly on procedure, rules and customs. For the first time in the history of the Nebraska State Medical Association House of Delegates, a special session was held this last February which was very fruitful and also made it possible to reduce the amount of work at this session.

"The next three sessions of this annual meeting will be held at 8:00 a.m., on Tuesday, Wednesday, and Thursday.

"This session will be devoted primarily to organizational activities. For the past several years the business of the House has been conducted on a reference committee basis and this has added immensely to the efficiency, allowing a great deal more work to be accomplished in a shorter period of time. With your permision, this meeting will be conducted on the same basis.

"It is to be recalled that delegates who call upon their alternate to serve in their place are not permitted to return as official delegates to ensuing sessions, the alternates must serve at these sessions.

"In the selection of a Nominating Committee, one member must be selected from each Councilor District, and only those who have attended at least one previous session of the House are eligible for selection.

"The time and place of hearings of the seven reference committees will be posted in a conspicuous place.

"You may rest assured that your Speaker will conduct the proceedings in such a manner that all are heard and within the time limits so as not to interfere with the scientific sessions."

Doctor Bradley again took the chair and asked the wishes of the House relative to conducting the sessions by having reference committees again this year.

A motion was made that this session be conducted on a reference committee basis. The motion was seconded and carried.

The following list was then read, subject to the ratification of the House:

Reference Committee No. 1 — Officers: R. C. Reeder, M.D., Chm., Fremont; Paul R. Martin, M.D., Ord; J. T. McGreer, Jr., M.D., Lincoln.

Reference Committee No. 2—Council: J. B. Christensen, M.D., Chm., Omaha; R. D. Bryson, M.D., Calloway; H. D. Runty, M.D., DeWitt.

Reference Committee No. 3—Constitution and By-Laws: R. S. Wycoff, M.D., Chm., Lexington; Paul Charlton, M.D., Hastings; C. M. Coe, M.D., Wakefield.

Reference Committee No. 4—Voluntary Prepayment: E. E. Koebbe, M.D., Chm., Columbus; Douglas Campbell, M.D., Scottsbluff; R. E. Garlinghouse, M.D., Lincoln.

*Reference Committee No. 5—Planning: G. Paul Charlton, M.D., Chm., Hastings; D. D. Stonecypher, M.D., Nebraska City; C. T. Mason, M.D., Superior. (*Personnel changed—see second session minutes).

Reference Committee No. 6—Public Health: W. W. Carveth, M.D., Chm., Lincoln; L. S. McNeill, M.D., Campbell; H. V. Nuss, M.D., Sutton.

Reference Committee No. 7—Miscellaneous: A. J. Offerman, M.D., Chm., Omaha; Wm. Nutzman, M.D., Kearney; F. M. Karrer, M.D., McCook.

A motion was made that the committees, as read and appointed by the chair, be approved. The motion was seconded and carried.

Doctor Bradley made the announcement that the Nominating Committee would meet once tomorrow, and at least two times on Wednesday, then report Thursday morning at the regular session at 8 o'clock.

A recess was called by the chair for the purpose of selecting a Nominating Committee.

Doctor Bradley again called the House to order and the following were nominated as members of the Nominating Committee:

1st District—J. B. Christensen, M.D., Omaha
2nd District—E. W. Hancock, M.D., Lincoln
3rd District—W. E. Shook, M.D., Shubert
4th District—R. H. Kohtz, M.D., Bloomfield
5th District—R. C. Reeder, M.D., Fremont
6th District—(H. O. Bell, M.D., York)*
7th District—C. T. Mason, M.D., Superior
8th District—(Wilber Johnson, M.D., Valentine)*
9th District—Wm. Nutzman, M.D., Kearney
10th District—F. M. Karrer, M.D., McCook
11th District—Willard Seng, M.D., Oshkosh
12th District—W. L. Lowell, M.D., Hyannis
*See third session minutes

A motion was made and seconded that the names as read by the chair be approved as the Nominating Committee for the 1953 session of the House of Delegates of the Nebraska State Medical Association. The motion carried.

Doctor Adams was given permission of the floor and made the announcement that Sportsman Dinner tickets could be purchased at the registration desk; that the Sportsman Dinner would be held at the Omaha Country Club with cocktails at 6 p.m. and dinner at 7 p.m. He further stated that tickets for the Academy of General Practice Luncheon, Tuesday noon, could also be purchased at the registration desk, and that it would be helpful if tickets were purchased early for these events, as well as for Tuesday Fun Night and the Wednesday Banquet.

Doctor Lee asked for permission of the floor and gave directions for the easiest way to get to the Omaha Country Club.

Doctor Bradley asked the Nominating Committee and the reference committees to give him, as soon as possible, the time they wished to meet tomorrow so that the information might be posted on the bulletin board. He further stated that Committee No. 1 would meet in Parlor F; Committee No. 2 in Parlor A; Committee No. 3 in Parlor A; Committee No. 4 in Parlor B; and Committees No. 5, 6, and 7 would meet in the Presidential Suite, Room 614.

Amendments to the Constitution and By-Laws were called for by the chair, but Doctor Wycoff stated there were none to be presented at this time.

The Supplemental Report of the Planning Committee was called for and Dr. Floyd L. Rogers read the report.

The chair ruled this report would be referred to Reference Committee No. 5—Planning.

The report of the Polio Coordinating Committee was read by Dr. R. B. Adams, in the absence of the Chairman, Dr. Harold N. Neu. This report contained the following resolution:

"WHEREAS the changing trends in medicine continue to focus the increased need of emphasis upon rehabilitation as the third phase of medicine, and

"WHEREAS this problem of rehabilitation will become an increasing responsibility of the medical profession as a whole and requires further emphasis in our medical school curricula, and,

"WHEREAS the field of poliomyelitis provides an important area in the field of rehabilitation,

"BE IT RESOLVED that the House of Delegates approve the creation of a rehabilitation and poliomyelitis committee as a permanent standing committee of the state medical association;

"BE IT FURTHER RESOLVED that as the progress in the field of rehabilitation continues, the responsibilities of the committee be limited to rehabilitation alone."

The chair ruled this report and resolution would be referred to Reference Committee No. 6—Public Health.

The report of the Council on Professional Ethics was called for by the chair.

Doctor Morris Nielsen stated this report would be made at the session tomorrow.

The chair called for further reports or resolutions.

Dr. Donald J. Bucholz read the following resolution:

PORTRAYAL OF PHYSICIANS IN TELEVISION AND RADIO ADVERTISING

WHEREAS television and radio are using more and more frequently in their advertisements individuals who, although not physicians, portray the part and, while garbed in white, embellished with stethoscope or head mirror, recommend to millions of listeners nostrums of all types and descriptions which supposedly cure many systemic diseases, highly vitaminized products from bread and milk to toothpaste, as well as cigarettes for their fancied effect on coughs and colds, and

WHEREAS physicians themselves have been used to corroborate the merits of certain products, as well as the authenticity of claims made by certain manufacturers, and have been depicted examining performers, such as magicians, to substantiate a claim as to their physical status before and after a mystic act on television, all of which is contrary to the Code of Ethics of the American Medical Association, and

WHEREAS these individuals, in the light of their characterization, imply that these products are accepted by the medical profession as being specifically ameliorative or curative, and

WHEREAS too large a percentage of our citizens who are credulous to such an approach are led astray as to the merits of these claims and thereby purchase and continue to use such nostrums at a time when they should be under the care of reputable physicians who would institute proper treatment and thereby enhance the possibilities of a return to health rather than lingering illness or death,

THEREFORE BE IT RESOLVED that the House of Delegates of the Nebraska State Medical Association, meeting in Annual Session, May 11, 1953, petition the American Medical Association, through its House of Delegates, to request the Federal Communications Commission, the National Association of Radio and Television Broadcasters, and the Federal Trade Commission to prohibit individuals from characterizing physicians and recommending products of any type or character as aids or remedies in the treatment of any ailment usual or unusual to the human, and

BE IT FURTHER RESOLVED that the Judicial Council of the American Medical Association be requested to investigate this matter and censure those of the profession who by the aforementioned conduct violate the Code of Ethics, and

BE IT FURTHER RESOLVED that copies of this resolution be forwarded to the Council on Pharmacy and Chemistry and the Legal Department of the American Medical Association, the Federal Communications Commission, the National Association of Radio and Television Broadcasters, and the Federal Trade Commission, and

BE IT FURTHER RESOLVED that copies of this resolution be transmitted to the State Medical Associations, and through them to their component county medical societies, urging them to forward similar resolutions to the American Medical Association, the Federal Communications Commission, the National Association of Radio and Television Broadcasters, and the Federal Trade Commission.

The chair ruled the resolution would be referred to Reference Committee No. 7—Miscellaneous.

Doctor Bradley announced that the Nominating Committee should meet immediately after the adjournment of the House to decide upon a Chairman and times of meeting for Tuesday and Wednesday.

He further asked that the various reference committees meet upon adjournment of the House to decide upon the time of meeting of each committee.

Doctor Bradley stated the House stood adjourned until 8 a.m., Tuesday, May 12, 1953.

HOUSE OF DELEGATES

May 12, 1953

The second session of the House of Delegates was called to order at 8:10 a.m., by Dr. J. D. Bradley, Speaker of the House, in Parlor C, Hotel Paxton, Omaha, Nebraska. Thirty-seven members were present.

Dr. R. B. Adams read the minutes of the previous session, and the chair ruled they would stand approved as read.

Doctor Bradley made the announcement that there was a change in chairmanship on Reference Committee No. 5—Planning. He stated Dr. D. D. Stonecypher had been named Chairman, and the third member of this committee was now Dr. R. P. Carroll of Laurel, Nebraska.

The next item on the agenda was unfinished business.

The chair called for representatives from Districts 6 and 8 for members of the Nominating Committee. No doctors were present from these districts, so the chair ruled this matter would again be brought up at the next session.

Dr. Morris Nielsen gave the report of the Council on Professional Ethics.

The chair called for new business, but none was presented.

The chair asked for permission to digress from the usual numerical order, and called for the report of Reference Committee No. 5—Planning.

Dr. D. D. Stonecypher gave the following report:

"Mr. Speaker, our committee recommends that this body approve and adopt the Report of the Planning Committee and the Supplemental Report of the Planning Committee, and that the House compliment the committee on the great amount of work they have done.

"Mr. Speaker, I so move."

The motion was seconded and discussion called for.

Dr. C. T. Mason called attention to the fact that the committee had added one sentence to each of the sections on membership of both the United Health Fund Committee on Blood and Blood Products, this sentence to read: "A new member to be appointed each year to serve for 5 years, replacing the retiring member."

A motion was made and seconded to amend the Report of the Planning Committee and the Supplemental Report of the Planning Committee to the extent of adding the sentence just read by Doctor Mason to the section on membership of both the United Health Fund Committee and the Committee on Blood and Blood Products. The motion carried.

The chair stated the motion now before the House was the adoption of the Report of the Planning Committee and the Supplemental Report of the Planning Committee as amended.

The question was called for and the motion carried.

Report of Reference Committee No. 1—Officers, was called for and Dr. R. C. Reeder gave the following report:

"Mr. Speaker, our committee recommends that the report of the Secretary-Treasurer, published in the April 1953 issue of The Nebraska State Medical Journal, page 142, be adopted as published, and I so move."

The motion was seconded and carried.

"Mr. Speaker, our committee recommends that the report of the Executive Secretary, published in the April 1953 issue of The Nebraska State Medical Journal, pages 145 and 146, be adopted as published, and I would so move."

The motion was seconded and carried.

"Mr. Speaker, the committee recommends that the report of the Delegate to the North Central Conference, published in the April 1953 issue of The Nebraska State Medical Journal, pages 147 and 148, be adopted as published, and I so move."

The motion was seconded and carried.

"Mr. Speaker, the committee recommends that the report of the Editor, published on pages 148 and 149 of the April 1953 issue of The Nebraska

State Medical Journal, be adopted as published. I so move."

The motion was seconded and carried.

"Mr. Speaker, I make the motion that the Report of the Medicolegal Advice Committee be adopted as submitted."

The motion was seconded and carried.

A motion was made and seconded that the Report of the Council on Professional Ethics be accepted as reported by Doctor Nielsen. The motion was seconded and carried.

A motion was made that the report as a whole of Reference Committee No. 1 — Officers, be accepted. The motion was seconded and carried.

Report of Reference Committee No. 2—Council, was called for and Dr. J. B. Christensen gave a partial report on the Life Membership section referred to his committee; however, the chair ruled this list be referred back to committee for clarification and report at a later meeting.

Dr. R. S. Wycoff read the following proposed change in Chapter XIV, Section 3, of the By-Laws:

"Chapter XIV—The Journal:

"Section 3. Delete the word 'Cooperative' in the first paragraph, which now reads: 'The advertising policy of the Journal shall be that of the Cooperative Medical Advertising Bureau of the American Medical Association, subject to the approval of the Board of Trustees';

"thus making the paragraph read: 'The advertising policy of the Journal shall be that of the medical advertising bureau of the American Medical Association, subject to the approval of the Board of Trustees'."

The chair ruled this proposed change would lay on the table for the required twenty-four hours.

Doctor Wycoff read the following proposed change in the Constitution which was presented at the 1952 session:

"Amend Article IV—Membership, Section 2, which now reads: 'The members of this Association shall be classified as:

'A. ACTIVE: Physicians who are active members in good standing in their component socities.

'B. ASSOCIATE: Physicians who are serving resident appointments in recognized hospitals in Nebraska.

'C. HONORARY: Members who are in good standing and have rendered outstanding service to this Association, or members who are in good standing but have retired from active practice and reside in Nebraska at the time of their election.'

"Add new paragraph D, which shall read as follows:

'D. LIFE: Life Membership as hereinafter defined in the By-Laws.'

"Mr. Speaker, inasmuch as this proposed change was presented last year, I would like to move its adoption at this time."

The motion was seconded and carried.

Doctor Wycoff stated a further report would be made at the next session.

Dr. E. E. Koebbe, Chairman of Reference Committee No. 4—Voluntary Prepayment, stated they had no report at this time.

The chair announced that all reference committees would have open hearings on all reports referred to them and urged the members to appear before the committees if they had suggestions to present.

Dr. W. W. Carveth, Chairman, gave the report of Reference Committee No. 6 — Public Health, as follows:

"Mr. Speaker, our committee recommends the adoption of the Report of the Committee on Atomic Injuries; we further recommend that the Committee on Atomic Injuries be dissolved due to the fact that the activities of this committee have been absorbed by the medical committee of the Civil Defense organization, and I so move."

The motion was seconded and carried.

"Mr. Speaker, we further recommend that the Report of the Public Health Committee be adopted. I would so move."

The motion was seconded and carried.

"Mr. Speaker, we recommend that the Report of the Tuberculosis Committee be adopted, and I so move."

The motion was seconded and carried.

"Mr. Speaker, our committee recommends also that the Report of the Mental Hygiene Committee be accepted, and that we accept their apologies 'for being rather slow on the up-take in getting this type of program ready.' Mr. Speaker, I move the adoption of the report with apologies appended thereto."

The motion was seconded and carried.

"Mr. Speaker, our committee would like to announce that the hearing on the Maternal and Child Health Committee report and the Supplemental report of this same committee, will be held in Room 614, 9 a.m. We also wish to state that the Report of the Polio Coordinating Committee will be open for hearing; and that we will have a report on both these committee reports at a later session."

Dr. A. J. Offerman stated that Reference Committee No. 7—Miscellaneous, was not ready to report at this time.

Dr. Harold S. Morgan was given permission of the floor, and thanked the House of Delegates, the members of the committees, and the members of the Association, for their splendid cooperation during the past year. He further stated that the Nebraska State Medical Association had made progress during the past year—perhaps not in memberships acquired—but in the volume of work accomplished and the intense interest of all in the organization. He also called attention to the starting time of all scientific sessions, and urged the members to visit the exhibit boothes during the sessions.

The chair announced that the Nominating Committee, under the chairmanship of Dr. E. W. Hancock, would hold its first meeting Tuesday, 4 p.m., in Parlor G; also, that they would have two meetings on Wednesday, time to be announced later and also posted on the bulletin board.

The chair called on Dr. J. D. McCarthy, Delegate to the A.M.A., for a few remarks. Doctor McCarthy stated he had nothing special to report, but that he would be glad to answer any questions he could, relative to the national group.

Doctor Adams asked permission of the floor and stated that all delegates who had not signed slips should do so before leaving the meeting in order that their names would be added to the official roll call.

Doctor Bradley stated he had some information in letter form relative to the recent increase in rates on malpractice insurance policies, and suggested that if anyone was interested, it was available at the speaker's table. He also again called attention of the House to the meetings to be held by the reference committees.

Doctor Bradley declared the second session of the House of Delegates of the Nebraska State Medical Association stood adjourned until 8 o'clock Wednesday morning.

HOUSE OF DELEGATES

May 13, 1953

The third session of the House of Delegates was called to order at 8:15 a.m., by Dr. J. D. Bradley, Speaker of the House of Delegates, in Parlor C, Hotel Paxton, Omaha, Nebraska. Thirty-six members were present.

The minutes of the second session were read by Dr. R. B. Adams, and approved as read.

The chair ruled that Dr. H. O. Bell, York, representative from the 6th Councilor District, and Dr. Wilber Johnson, Valentine, representative from the 8th Councilor District, would be seated as members of the Nominating Committee, thus completing the personnel of the committee. He further stated that the Nominating Committee would meet in Parlor G immediately upon adjournment of the session, and again at 4 o'clock today in Parlor G; also, the Board of Councilors would meet in Parlor C, immediately after adjournment of the House.

The chair called for old, and new business, but none was presented.

Dr. R. E. Garlinghouse asked for permission of the floor. He called attention to the fact that there was considerable effort put forth to organize and carry on the activities of Sportsman Day; also, that there were some of the delegates who would like to participate, but that duties in the House of Delegates prevented; therefore, he would like to present the following motion:

I move that for at least next year the speaker have the power to set the time of the various meetings of the House of Delegates, but efforts should be made that it will not conflict with the functions of Sportsman Day and, specifically, that the Tuesday meeting of the House of Delegates be held later than at 8 o'clock. The motion was seconded and carried.

The chair called for presentation of resolutions, and Dr. H. V. Crum read the following resolution:

RESOLUTION

RESOLVED by the North West Nebraska County Medical Society at their meeting in Chadron, Nebraska, this 15th day of April, 1953.

WHEREAS, it appears that many patients, not suffering from service connected disabilities and financially able to pay for private hospitalization and medical care, are imposing on their local physicians to refer them to a Veterans Administration Hospital for treatment, and that it is a matter of common knowledge to both physician and patient that many of this group of persons are being received and treated at these hospitals; thus tending to induce a form of socialized medicine to the veteran population of this country, to which we are unalterably opposed;

AND WHEREAS, it is impossible for the local physician to act as a "police force" for the veterans administration regarding application and admission to these hospitals for the following reasons, viz:

(1) That the local physician is not in a position to know the extent or the content of the numerous administrative rules and regulations governing the eligibility and classification for admission to these veterans hospitals.

(2) That without a complete medical history and service record of the patient it would be unjust and inequitable for the local practitioner to attempt to make such a decision, which might deny the patient of a very valuable privilege.

NOW, THEREFORE, be it resolved by the North West Nebraska County Medical Society that the remedy to the above situation lies in the proper enforcement of the laws of Congress and the rules and regulations thereunder, by the Veterans Administration Hospitals; that these laws and administrative regulations should be strictly adhered to, and all admissions and classifications for admittance to these hospitals kept within the scope of these said laws and that some affirmative action should be taken by the Nebraska State Medical Association to stimulate the proper enforcement of these laws and the rules and regulations thereunder.

NORTH WEST NEBRASKA COUNTY
MEDICAL SOCIETY,
Ben C. Bishop, M.D., President,
Roy G. Brown, M.D., Secretary.

The chair ruled this resolution would be referred to Reference Committee No. 7—Miscellaneous.

Dr. A. J. Offerman read the following resolution:

WHEREAS, R. G. Gustavson, teacher, investigator, and administrator of international renown, and Chancellor of the University of Nebraska, has shown a keen understanding of the problems of medical education and medical care and has been an important factor in the recent developments at the College of Medicine, and

WHEREAS, Chancellor Gustavson is resigning from the University of Nebraska in the near future, now

THEREFORE BE IT RESOLVED, that the House of Delegates of the Nebraska State Medical Association sincerely regrets his resignation, and extends to him their best wishes and confidence in the success of his future activities; that the Nebraska State Medical Association is deeply appreciative of Chancellor Gustavson's efforts to improve the quality of medical education in Nebraska.

A motion was made that the resolution be adopted. The motion was seconded and carried.

Dr. A. J. Offerman presented the following resolution.

WHEREAS, the best medical care and medical progress requires the intensive and continual education of doctors, nurses, and other professional personnel, and

WHEREAS, it has been proven that the development of intensive training and medical centers improves the number and ability of medical personnel within the state providing such facilities, and

WHEREAS, the concentration of educational personnel in a medical center aids in medical research and in the application of research to problems within the state, and

WHEREAS, the Board of Control has shown its appreciation and understanding of the importance of these factors in this state and is making a major allotment of funds to the construction and operation of a new Psychiatric Unit for the purpose of furthering the above objectives, such objectives being already attained in part in their present psychiatric unit, now

THEREFORE BE IT RESOLVED, that the House of Delegates of the Nebraska State Medical Association express its appreciation and commendation to the Board of Control for its understanding and supprt of this program, and that the Bard of Control be properly notified of this resolution.

A motion was made that the House of Delegates adopt the resolution. The motion was seconded and carried.

Permission of the floor was granted to Dr. Homer Davis of Genoa, Past President of the Nebraska State Medical Association, and Doctor Davis spoke briefly to the House.

Dr. K. S. J. Hohlen, another Past President of the association, was presented to the members of the House.

Dr. George W. Covey, Editor of the Journal, was given permission of the floor and stated he hoped all had read the notice in The Nebraska State Medical Journal relative to his request for communications from anyone wishing to present comments or ideas pertaining to the Journal.

Dr. Rudolph F. Decker, Past Speaker of the House of Delegates, extended his greetings and best wishes to his successor and to the House of Delegates.

The report of Reference Committee No. 2—Council, was called for and Dr. J. B. Christensen, Chairman, gave the following report:

"Mr. Speaker and Delegates:

"We have reviewed the reports of the Audit for 1952 as published in the printed 'Annual Audit and Committee Reports' and move the adoption of the audit report."

The motion was sceonded and carried.

"We have reviewed the report of the Board of Trustees, the budget for 1954 as published, and move the adoption of this report."

The motion was seconded and carried.

"We have reviewed the report of the Delegate to the American Medical Association, Regular Session, as published in the August 1952 journal, and the report of the Delegate to the Interim Session, as published in the committee reports, and move the adoption of these reports."

The motion was seconded and carried.

"We have reviewed the listing of proposed Life Memberships as approved by the Board of Councilors, and would like at this time to read the names:

"Adams County—L. W. Rork, M.D., Hastings (deceased); J. P. Feese, M.D., Hastings.

"Dawson County—H. M. Harvey, M.D., Gothenburg.

"Fillmore County—V. V. Smrha, M.D., Milligan.

"Lancaster County—W. L. Albin, M.D., Lincoln; J. B. Williams, M.D., Lincoln.

"Lincoln County—E. F. Carr, M.D., Stapleton.

"Merrick County—Frederick Fouts, M.D., Central City.

"Nance County—Homer Davis, M.D., Genoa.

"Omaha - Douglas County — Alfred Brown, M.D., Omaha; H. F. Gerald, M.D., Omaha; Lynn T. Hall, M.D., Omaha; Chas. Hickey, M.D., Bennington; Chas. McMartin, M.D., Omaha; Chas. J. Nemec, M.D., Omaha; D. T. Quigley, M.D., Omaha; Geo. F. Simanek, M.D., Omaha; C. C. Tomlinson, M.D., Omaha; Thomas Torpy, M.D., Omaha.

"Scottsbluff County — N. H. Rasmussen, M.D., Scottsbluff.

"Thayer County—V. D. Douglas, M.D., Carleton.

"Mr. Speaker, we move the adoption of the report of Life Memberships."

The motion was seconded and discussion ensued relative to giving a Life Membership to deceased members. It was the opinion of the group that Life Membership could be bestowed posthumously and that the family of the deceased could be so notified.

The question was called for and the motion carried.

"Mr. Speaker, I move the adoption of the report as a whole of Reference Committee No. 2—Council."

The motion was seconded and carried.

Dr. R. S. Wycoff gave the following report of Reference Committee No. 3—Constitution and By-Laws:

"Mr. Speaker, I want to say that most of the material which will be presented this morning will be presented at the request of different members of the association. The committee has not had a great deal of time to consider it, and we are hoping there will be considerable discussion on the items presented. We had only our own thinking, and with limited time to do that in, we are not sure our thinking is in accord with yours.

"Following are some proposed changes in the Constitution:

"The following changes in Article IV, Section 2, of the Constitution of the Nebraska State Medical Association, are proposed in order to bring this section of the Constitution into more complete harmony with the Constitution of the American Medical Association.

"a. Delete Section B and substitute the following:

'B. ASSOCIATE MEMBERSHIP: (a) A physician holding the degree of Doctor of Medicine, serving as an intern or resident in a hospital; or (b) a physician residing in Nebraska and employed by the Federal Government.'

"b. Add a new section, E, which shall read as follows:

'E. SERVICE MEMBERSHIP: Regularly commissioned officers of the United States Army, the United States Navy, the United States Air Force, or the United States Public Health Service, who have been nominated by the Surgeons General of the respective services, and the permanent medical officers of the Veterans Administration and of the Indian Service, who have been nominated by their Chief Medical Directors, may become Service Members on approval of the Board of Councilors. Such members shall have the same rights and privileges as Active Members, and shall pay such dues as may be determined by the Board of Councilors. Service Members shall retain membership as long as they are on active duty, and thereafter, if they have been retired in accordance with federal law and do not engage in active practice."

General discussion followed and it was the concensus of the group that thought should be given to this amendment before passage.

The chair ruled the amendment would have to lay over for one year.

"Proposed change in the Constitution—

"In accord with the change suggested by President Morgan in his presidential message yesterday, the following change in the Constitution is proposed:

'In Section 4 of Article VI, delete in line 2 the third word (4) and substitute 'nine';
then in line 3 delete the fifth word (1) and substitute the word 'two';
then after the period in line 3, add the following: 'except that every fourth year three members shall be elected.' 'The terms of office of the newly-elected members shall be so arranged as to provide for retirement of two members

of the Board each year, except in every fourth year, when three shall be retired, and their successors appointed.' 'Election thereafter shall be for four years.'

"This will make the entire section 4 read as follows:

"'The Board of Trustees shall be composed of the Secretary-Treasurer and nine members elected by the Council, each for a term of four years, so rotated that two shall be elected each year, except that in every fourth year three shall be elected.

'The terms of office of the newly-elected members shall be so arranged as to provide retirement of two members of the Board each year, except for every fourth year, when three shall be retired and their successors elected. Election thereafter shall be for four years.

'Members of the Board of Trustees shall serve not more than two terms. Members of the Board of Councilors shall not be eligible for election to the Board of Trustees.'

"The second paragraph in this Section 4 shall remain unchanged."

The chair ruled the amendment would also have to lay over for one year.

"Proposed change in the By-Laws—

"Under Chapter X of the By-Laws, it has been proposed to add a new section which shall specifically delegate to the Board of Trustees any interim action which may be felt to be of such a nature as to affect the entire membership of the Nebraska State Medical Association. This new section would be Number 4, Chapter X, and this committee proposes the following:

'The Board of Trustees shall be empowered to act as an Executive Committee on any matters affecting the membership of the Association as a whole, during the intervals between the regular or called meetings of the House of Delegates'."

General discussion followed and it was pointed out that the amendment would create another legislative body, thus making the association have two such legislative bodies.

Due to the powers delegated to the Board of Trustees in the proposed change, the chair ruled that it should be held over for further study and discussion before vote was taken.

"Proposed change in the By-Laws—

"It has been suggested to this committee that a 'Committee on Constitution and By-Laws' should be a standing committee of the Nebraska State Medical Association, rather than a committee of the House of Delegates. For this reason, we wish to propose the following addition to Section 2 of Chapter XII of the By-Laws:

'R. The Committee on Constitution and By-Laws shall consist of three members, the terms of appointments being so rotated that each member shall serve for three years. One member shall be appointed to this committee each year by the President-Elect.

'This committee shall consider all suggestions made to revise or amend the Constitution and By-Laws. It shall compose such provisions or amendments and present them to the Association for adoption or revision, as provided in Article XIII and Chapter XVI of the Constitution and By-Laws of the Nebraska State Medical Association'."

The chair ruled this amendment would lay over 24 hours.

"Proposed change in By-Laws—

"In accord with the recommendations of the Planning Committee, the Committee on Constitution and By-Laws proposes the following addition to Chapter XII, Section 2, of the By-Laws:

'Item S. (a) A United Health Fund Committee shall be appointed by the President. Succeeding annual appointments shall be made by the President-Elect.

'(b) The membership of this committee shall be composed of five members of the Nebraska State Medical Association, one to be appointed for five years, one for four years, one for three years, one for two years, and one for one year, a new member then to be appointed each year to serve for five years, replacing the retiring member. The chairman of this committee shall be designated annually by the President of the Nebraska State Medical Association, and shall be one of these members.

'In addition, one lay and one medical member shall be added from each of the other member organizations, the selection of these committee members to be made by such member organization.

'(c) The five medical members appointed by the President of the Nebraska State Medical Association shall constitute an Executive Committee for the United Health Fund Committee. The Executive Committee shall act in an advisory capacity, and shall assume authority over the division of funds. This division shall be made annually from the net proceeds of the campaign. The division shall be made on a basis of needs and merits of the member organizations, and the decision of the Executive Committee shall be final.

'(d) When the United Health Fund Committee is established, Cancer, Rheumatism and Arthritis, Heart, and Multiple Sclerosis will be invited to join. Subsequently, other health organizations may be admitted by a three-fourths vote of the committee.

'(e) The United Health Fund Committee shall annually conduct a United Health Fund Drive for the member organizations. The member organizations are not to conduct other drives on their behalf.

'(f) The member organizations shall use these funds to emphasize research and education, both lay and medical. Treatment, as usually rendered by the practitioner of medicine. shall not be provided from these funds.

'(g) The Executive Committee shall report annually to the Board of Councilors and the House of Delegates'."

The chair ruled this change would lay over 24 hours.

"Proposed change in the By-Laws—

"In accordance with the recommendations of the Planning Committee, the Committee on Constitution and By-Laws proposes the following addition to Chapter XII, Section 2, of the By-Laws:

"Item T. (a) A Committee on Blood and Blood Products shall be appointed by the President. Succeeding annual appointments shall be made by the President-Elect.

'(b) The Committee on Blood and Blood Products shall consist of five members, one to be appointed for five years, one for four years, one for three years, one for two years, one for one year, and a new member then to be appointed each year to serve for five years, replacing the retiring member. The chairman of this committee shall be designated annually by the President of the Nebraska State Medical Association.

'(c) The duties of the Committee on Blood and Blood Products shall be:

1. To review the literature and correspondence, especially from the American Medical Association, relative to the establishment, purpose, and activities of state-level Blood Committees.

2. To direct activities within our state to the end that Nebraska may cooperate with other states and national organizations in collection and disposition of blood and blood products.

3. To interest themselves in the standardization of blood banks throughout the state.

4. To accept the responsibility for further development of the whole problem of blood and blood products within the state.

5. To report annually to the Board of Councilors and the House of Delegates."

The chair ruled this amendment would lay over 24 hours.

"Addition to Chapter XII, Section 2, of the By-Laws—

"U. The Committee on Medical Education shall consist of 7 members, appointed by the President-Elect, each of whom shall serve for a term of 7 years, so rotated that one member shall be appointed each year. This committee shall concern itself with the problems of medical education in Nebraska. It shall be a liaison committee betwen the two medical colleges of the state and shall interest itself and make recommendations concerning postgraduate education for the physicians of the state."

The chair ruled this amendment would lay on the table for 24 hours.

The report of Reference Committee No. 4—Voluntary Prepayment, was given by Dr. E. E. Koebbe, Chairman:

"Mr. Speaker, your committee recommends the adoption of the Report of the Prepayment Medical Care Committee. Mr. Speaker, I so move."

The motion was seconded and carried.

"Your committee also recommends the adoption of the general report of Blue Shield (Nebraska Medical Service). I move the adoption of this report."

The motion was seconded and carried.

"Your committee recommends approval of the Report of the Committee on Uniform Fee Schedule and Advisory to Governmental agencies; and we also commend very highly the work of the sub-committee in compiling the Formulary, which is now in print and which will be distributed to all of the members of the Nebraska State Medical Association. Mr. Speaker, I move the adoption of this report."

The motion was seconded and carried.

'Mr. Speaker, I move the adoption of the complete report of Reference Committee No. 4—Voluntary Prepayment."

The motion was seconded and carried.

Doctor Bradley introduced Mr. Edward F. Stegen, representative of the National Foundation for Infantile Paralysis from New York City, and he briefly addressed the House.

A report of Reference Committee No. 5—Planning, was given by Dr. D. D. Stonecypher, Chairman:

"Mr. Speaker, in regard to the Report of the Committee on Hospital and Professional Relations, the committee recommends its acceptance with no reservations. I move the acceptance."

The motion was seconded and carried.

"The Report of the Public Relations Committee was referred to Reference Committee No. 5, and we recommend that the report be accepted. I move the acceptance and adoption of this report."

The motion was seconded and carried.

"We recommend to the House of Delegates that the Report of the Rural Medical Service Committee be accepted. I so move."

The motion was seconded and carried.

"Mr. Speaker, I move the acceptance of the report of Reference Committee No. 5—Planning, in toto."

The motion was seconded and carried.

In the absence of Dr. W. W. Carveth, Chairman, Reference Committee No. 6—Public Health, the following report was given by Dr. L. S. McNeill:

"Mr. Speaker, we have considered at some length the original and revised Report of the Maternal and Child Health Committee, and there seems to be considerable amount of controversy regarding this report, especially the section of the report pertaining to investigation of maternal deaths in the state. Because of this, we would like to throw it back into the lap of the general session before we make disposition of the committee report. I would like permission to read Section 3 of the report."

Permission was granted and Section 3 of the Maternal and Child Health Committee Report was read to the House. After this reading, Doctor McNeill stated they had talked to Dr. E. A. Rogers of the Department of Health yesterday relative to the $2,400 estimated cost, and he had said this could be taken care of by the department; in fact, it was temporarily set up and they were waiting the approval of this body. Doctor McNeill further stated the committee would recommend that the House of Delegates of the Nebraska State Medical Association should control the study and should approve any changes, instead of the 'Council,' as stated in the report.

The chair asked that this committee confer with the Committee on Constitution and By-Laws, and then report at the session tomorrow morning.

Doctor McNeill stated nothing had been done on the report of the Polio Coordinating Committee, and that they would make their final report tomorrow.

Dr. A. J. Offerman gave the following report for Reference Committee No. 7—Miscellaneous:

"Mr. Speaker, we have quite a lot of material to consider, but I think we can do it rather quickly.

"The committee approves and recommends for adoption the resolution 'Portrayal of Physicians in Television and Radio Advertising.' I so move, Mr. Speaker."

The motion was seconded and carried.

"We have a communication from the subcommittee of 'Muscular Dystrophy Associations of America, Inc.', requesting cooperation of the Nebraska State Medical Association, and the committee recommends that this matter be referred to the (*proposed) United Health Fund Committee (*if and when established) for proper action. I so move.

*See fourth session minutes

The motion was seconded and carried.

"We have a similar communication from the Nebraska Chapter, National Multiple Sclerosis Society, requesting cooperation of the Nebraska State Medical Association, and the committee recommends that this request be referred to the (proposed*) United Health Fund Committee (if and when established*) for proper action. I so move."

The motion was seconded and carried.

"The committee approves and recommends for adoption:

1. Report of Industrial Health Committee
2. Report of Cancer Committee
3. Report of Cardiovascular Committee
4. Report of Venereal Disease Committee
5. Report of Cerebral Palsy Committee
6. Report of Diabetes Committee

"I so move."

The motion was seconded and carried.

"Several communications have been received from various state and county medical societies concerning the Doctor Draft Law. Inasmuch as the American Medical Association has made adequate and proper presentation to the Congressional Committee considering the Doctor Draft Law, your committee thinks that no action is now necessary in regard to these various communications from:

1. Spokane County Medical Society
2. Passaic County Medical Society
3. West Virginia State Medical Association
4. Medical Society of the County of Erie

"I so move."

The motion was seconded and carried.

"We have communications from the Association of American Physicians and Surgeons, Inc., requesting support of the 'Bricker Senate Resolution No. 177. Resolution on Support H.J. Res. 491. Resolution to Eliminate Nationalized Medicine Section of Public Law 590. Resolution on ILO.' Inasmuch as the Legislative Committee of the American Medical Association has taken appropriate action on the above resolutions, your committee recommends that no action is necessary now in regard to this communication, and I so move."

The motion was seconded and carried.

"We have a resolution from the Harris County Medical Society in regard to the re-organization of the Federal Security Agency. Your committee recommends no action be taken on this request. I so move."

The motion was seconded and carried.

"We have a communication from the Blair County Medical Society, Altoona, Pennsylvania, requesting support of a Resolution to the American Medical Association protesting, 'Revision of the Essentials of an Approved Internship.' The committee recommends that this resolution should not be supported, and I so move."

The motion was seconded and carried.

"Mr. Speaker, we will have a supplementary report tomorrow."

Dr. E. A. Rogers, Acting Director, Department of Health, was given permission of the floor, but stated he had nothing to report.

Dr. James F. Kelly, President, briefly addressed the House.

Doctor Bradley stated he would like to call the attention of the House to the importance of distinguishing between the "Council" and "Board of Councilors," due to the fact we now have in the framework of the organization the "Council on Professional Ethics" and material referring just to "Council" could be interpreted to be either of these bodies.

Doctor Adams asked all delegates who had not signed slips to do so for the official roll call.

Doctor Bradley declared the House of Delegates adjourned until 8 a.m., Thursday, May 14, 1953.

HOUSE OF DELEGATES

May 14, 1953

The fourth session of the House of Delegates was called to order at 8:10 a.m. by Dr. J. D. Bradley, Speaker of the House of Delegates, in Parlor C, Hotel Paxton, Omaha, Nebraska. Thirty-four members were present.

A motion was made that the reading of the minutes be dispensed with and that they be adopted as printed. The motion was seconded and carried.

The chair recognized Mr. M. C. Smith, Executive Secretary. Mr. Smith presented Mr. Harvey Sethman, Executive Secretary of the Colorado State Medical Society, to the House and Mr. Sethman stated he brought greetings and good wishes from the Colorado Society.

The report of the Nominating Committee was called for by the Chair. Dr. E. W. Hancock read the following report:

"Your Nominating Committee has met as required and has selected the following slate:

"For:

President-Elect—Earl Leininger, M.D.

Vice President—Wm. M. McGrath, M.D.
Speaker, House of Delegates—J. D. Bradley, M.D.
Vice Speaker, House of Delegates—Fritz Teal, M.D.
Councilor—
  9th District—B. R. Bancroft, M.D.
  10th District—B. M. Karrer, M.D.
  11th District—C. F. Heider, M.D.
  12th District—Frank Herhahn, M.D.
Delegate to A.M.A.—K. S. J. Hohlen, M.D.
Alt. Delegate to A.M.A.—Earl Leininger, M.D.
Del. to North Central Conference — F. L. Rogers, M.D.
Board of Directors, Nebraska Medical Service—
  1. Howard Hunt, M.D.
  2. John Courtney, M.D.
  3. Glen E. Peters, M.D.
  4. Edmund Walsh, M.D.

E. W. HANCOCK, M.D., Chm."

Nominations from the floor were called for but none were presented.

A motion was made and seconded to accept the report of the Nominating Committee, and that the secretary be instructed to cast the unanimous ballot for the officers named. The motion carried.

The Secretary cast the unanimous ballot of the House and the following became the newly elected officers of the Nebraska State Medical Association:

President-Elect—Earl Leininger, M.D.

Vice President—Wm. M. McGrath, M.D.

Speaker, House of Delegates—J. D. Bradley, M.D.

Vice Speaker, House of Delegates — Fritz Teal, M.D.

Councilor—
  9th District—B. R. Bancroft, M.D.
  10th District—F. M. Karrer, M.D.
  11th District—C. F. Heider, M.D.
  12th District—Frank Herhahn, M.D.

Delegate to A.M.A.—K. S. J. Hohlen, M.D.

Alternate Delegate to A.M.A. — Earl Leininger, M.D.

Delegate to North Central Conference — F. L. Rogers, M.D.

Board of Directors, Nebraska Medical Service—
  Howard Hunt, M.D.
  John Courtney, M.D.
  Glen E. Peters, M.D.
  Edmund Walsh, M.D.

Doctor Bradley appointed Drs. F. M. Karrer and Fay Smith to bring the newly elected President-Elect before the House.

Dr. Earl Leininger thanked the House for the honor bestowed upon him and stated he would most certainly do everything in his power to do as good a job as possible.

Dr. W. W. Carveth gave a supplemental report for Reference Committee No. 6—Public Health.

> "Mr. Speaker, your committee approves the report of the Polio Coordinating Committee, and we move the adoption of the resolution contained in this report as follows:

RESOLUTION

WHEREAS the changing trends in medicine continue to focus the increased need of emphasis upon rehabilitation as the third phase of medicine, and

WHEREAS this problem of rehabilitation will become an increasing responsibility of the medical profession as a whole and requires further emphasis in our medical school curricula, and

WHEREAS the field of poliomyelitis provides an important area in the field of rehabilitation,

BE IT RESOLVED that the House of Delegates approve the creation of a rehabilitation and poliomyelitis committee as a permanent standing committee of the Nebraska State Medical Association.

BE IT FURTHER RESOLVED that as the progress in the field of rehabilitation continues, the responsibilities of the committee be limited to rehabilitation alone.

"We move the adoption of this resolution."

The motion was seconded and discussion called for. After discussion, the original motion was withdrawn, with the consent of the second, and the following motion was substituted:

A motion was made that the resolution as read be referred to the Committee on Constitution and By-Laws without action from the House. The motion was seconded and carried.

Dr. James Kelly asked for clarification of the status of the Polio Coordinating Committee, and it was the concensus of the House that he could reappoint the committee as an interim committee.

The chair recognized Dr. L. S. McNeill, who continued the report for Reference Committee No. 6.

> "Mr. Speaker, you will recall yesterday we brought up the report on Maternal and Child Health and made mention there was considerable controversy about it. It was referred back to the committee with the instructions that a joint meeting be held with Reference Committee No. 3. We held a meeting, but this is still a highly controversial problem and we would like to toss it back in the laps of the House again."

The report was opened for discussion, and after several members had spoken in clarification of the reason for the request made by the Maternal and Child Health Committee for the formation of a committee to study maternal mortality in Nebraska, it was the opinion of the House that the matter needed further study and that it would be wise to send it back to the Maternal and Child Health Committee for report next year.

The chair ruled the report would be referred back to the Maternal and Child Health Committee for further study and report next year.

A motion was made that the House accept the report as a whole of Reference Committee No. 6—Public Health. The motion was seconded and carried.

Dr. A. J. Offerman gave the following report for Reference Committee No. 7—Miscellaneous:

> "Mr. Speaker, I would like to amend our report of yesterday relative to those matters which we referred to committees not yet established. I would like to move that the word 'proposed' and the words 'if and when established' be inserted in the report of yesterday."

The motion was seconded and carried.

> "Mr. Speaker, relative to the Resolution on 'Admission to Veterans Administration Hospitals of Non-Service-Connected Cases,' your committee is in accord with the idea expressed in that portion of the resolution objecting to the admission of non-service-connected, non-indigent, non-catastrophic illness cases to V.A. Hospitals, and is of the opinion that the Ne-

braska State Medical Association should continue its efforts to effect the necessary changes to stop the practice of admitting non-service-connected, non-indigent, non-catastrophic illness cases to V.A. Hospitals.

"This effort should be carried out mainly through the continued efforts of the existing committees of the American Medical Association. The A.M.A. committees are well aware of the situation and currently are working with interested veteran organizations and the Veterans Administration to solve this difficult and complex situation. Our Delegates to the A.M.A. will support the A.M.A.'s committees' actions.

"Doctors in their local communities should accept responsibility for the policy of admission to veterans hospitals of non-service-connected cases, and should refrain from signing applications for admission to V.A. hospitals for non-service-connected, non-indigent, non - catastrophic illness cases.

"Finally, your committee is of the opinion that no real American wants to be a 'kept man.'

"I move the adoption of this report."

The motion was seconded and carried.

"Mr. Speaker, I move that the report of Reference Committee No. 7—Miscellaneous, be adopted as a whole."

The motion was seconded and carried.

Doctor Wycoff gave the following report for Reference Committee No. 3—Constitution and By-Laws:

"Mr. Speaker, first, we will consider the proposed change in the By-Laws which was read on Tuesday as follows:

"Chapter XIV—The Journal:

"Section 3. Delete the word 'Cooperative' in the first paragraph, which now reads: 'The advertising policy of the Journal shall be that of the Cooperative Medical Advertising Bureau of the American Medical Association, subject to the approval of the Board of Trustees;'

"thus making the paragraph read: 'The advertising policy of the Journal shall be that of the medical advertising bureau of the American Medical Asociation, subject to the approval of the Board of Trustees.'

"I move the adoption of this change in the By-Laws."

The motion was seconded and carried.

"Mr. Speaker, the next proposed change in the By-Laws is as follows:

"Add new section, which will be number 4, to Chapter X, which will read:

'The Board of Trustees shall be empowered to act as an Executive Committee on any matters affecting the membership of the Association as a whole during the intervals between the regular or called meetings of the House of Delegates.'

'In order to bring this up for discussion, I move the adoption of this proposed change."

The chair ruled the motion was lost for want of a second.

"Proposed change in the By-Laws:

"Add the following to Section 2, Chapter XII:

'R. The Committee on Constitution and By-Laws shall consist of three members, the terms of appointments being so rotated that each member shall serve for three years. One member shall be appointed to this committee each year by the President-Elect.

'This committee shall consider all suggestions made to revise or amend the constitution and By-Laws. It shall compose such provisions or amendments and present them to the Association for adoption or revision, as provided in Article XIII and Chapter XVI of the Constitution and By-Laws of the Nebraska State Medical Association.'

"Mr. Speaker, I move the adoption of this amendment."

The motion was seconded, and after discussion to clarify the qualifications of the members of the committee, the question was called for and the motion carried.

"Proposed addition to Chapter XII, Section 2, of the By-Laws:

'Item S. (a) A United Health Fund Committee shall be appointed by the President. Succeeding annual appointments shall be made by the President-Elect.

'(b) The membership of this committee shall be composed of five members of the Nebraska State Medical Association, one to be appointed for five years, one for four years, one for three years, one for two years, and one for one year, a new member then to be appointed each year to serve for five years, replacing the retiring member. The chairman of this committee shall be designated annually by the President of the Nebraska State Medical Association, and shall be one of these members. In addition, one lay and one medical member shall be added from each of the other member organizations, the selection of these committee members to be made by such member organization.

'(c) The five medical members appointed by the President of the Nebraska State Medical Association shall constitute an Executive Committee for the United Health Fund Committee. The Executive Committee shall act in an advisory capacity, and shall assume authority over the division of funds. This division shall be made annually from the net proceeds of the campaign. The division shall be made on a basis of needs and merits of the member organizations, and the decision of the Executive Committee shall be final.

'(d) When the United Health Fund Committee is established, Cancer, Rheumatism and Arthritis, Heart, and Multiple Sclerosis will be invited to join. Subsequently, other health organizations may be admitted by a three-fourths vote of the Committee.

'(e) The United Health Fund Committee shall annually conduct a United Health Fund Drive for the member organizations. The member organizations are not to conduct other drives on their behalf.

'(f) The member organizations shall use these funds to emphasize research and education, both lay and medical. Treatment, as usual ly rendered by the practitioner of medicine, shall not be provided from these funds.

'(g) The Executive Committee shall report annually to the Board of Councilors and the House of Delegates.'

"Mr. Speaker, I move the adoption of this amendment to the By-Laws."

The motion was seconded and carried.

"Another proposed change in the By-Laws, adds the following addition to Chapter XII, Section 2:

'Item T. (a) A Committee on Blood and Blood Products shall be appointed by the President. Succeeding annual appointments shall be made by the Presient-Elect.

'(b) The Committee on Blood and Blood Products shall consist of five members, one to be appointed for five years, one for four years, one for three years, one for two years, one for one year, and a new member then to be appointed each year to serve for five years, replacing the retiring member. The chairman of this committee shall be designated annually by the President of the Nebraska State Medical Association.

'(c) The duties of the Committee on Blood and Blood Products shall be:

1. To review the literature and correspondence, especially from the American Medical Association, relative to the establishment, purpose, and activities of state-level blood committees.

2. To direct activities within our state to the end that Nebraska may cooperate with other states and national organizations in the collection and disposition of blood and blood products.

3. To interest themselves in the standardization of blood banks throughout the state.

4. To accept the responsibility for further development of the whole problem of blood and blood products within the state.

5. To report annually to the Board of Councilors and the House of Delegates.'

"Mr. Speaker, I move the adoption of this addition to the By-Laws."

The motion was seconded and carried.

"The following is an addition to Chapter XII, Section 2, of the By-Laws:

'Item U. The Committee on Medical Education shall consist of 7 members appointed by the President-Elect, each of whom shall serve for a term of 7 years, so rotated that one member shall be appointed each year. This committee shall concern itself with the problems of medical education in Nebraska. It shall be a liaison committee between the two medical colleges of the state and shall interest itself and make recommendations concerning post-graduate education for the physicians of the state.'

"Mr. Speaker, I move the adoption of this addition to the By-Laws."

The motion was seconded and carried.

"Mr. Speaker, I move the adoption of the report of Reference Committee No. 3 as a whole."

The motion was seconded and carried.

The chair gave permission of the floor to Dr. J. D. McCarthy. Doctor McCarthy introduced Dr. Gunnar Gundersen of LaCrosse, Wisconsin, a member of the Board of Trustees of the American Medical Association, and also a member of the Board of Directors of the American Medical Education Foundation, who spoke briefly to the House.

The chair announced that the next order of business was the fixing of the place for next year's meeting, and read a telegram and letter from the Hotel Cornhusker, inviting the Nebraska State Medical Association to make their headquarters for the 1954 meeting at Hotel Cornhusker.

Dr. R. E. Garlinghouse invited the association, on behalf of the Lancaster County Medical Society, to hold its next Annual Session in Lincoln.

A motion was made to accept the invitation of the Lancaster County Medical Society to meet in Lincoln next year. The motion was seconded and carried.

A motion was made that the customary letters of appreciation be sent to the Omaha-Douglas County Medical Society, the Hotel Paxton, and the Chamber of Commerce, for the courteous and efficient treatment received by the association during the meeting. The motion was seconded and carried.

The chair announced that next year the House of Delegates would meet on Monday at 11 a.m., Tuesday at 12 noon, and Wednesday and Thursday at 8 a.m.

Doctor Bradley thanked the House of Delegates for their cooperation, and stated he wanted to especially thank the reference committees for the amount of splendid work they had done. He further stated it had been a pleasure to conduct the sessions and wanted the House to know of his appreciation.

The chair announced the final session of the 1953 House of Delegates stood adjourned.

PROCEEDINGS OF BOARD OF COUNCILORS, ANNUAL SESSION, NEBRASKA STATE MEDICAL ASSOCIATION

May 12, 1953

The first meeting of the Board of Councilors was called to order by Dr. Earl F. Leininger, Chairman, at 5 o'clock in Parlor C, Hotel Paxton, Omaha, Nebraska.

The following members were present: Drs. Paul S. Read, W. C. Kenner, J. C. Waddell, W. E. Wright, R. T. Van Metre, F. A. Mountford, R. R. Brady, Wm. M. McGrath, Earl F. Leininger.

Also present were Drs. James F. Kelly, President; R. B. Adams, Secretary-Treasurer; J. D. Bradley, Speaker, House of Delegates; J. E. M. Thomson, Board of Trustees, and M. C. Smith, Executive Secretary.

A motion was made by Dr. J. C. Waddell that the minutes of the previous session be adopted as published. The motion was seconded by Dr. W. C. Kenner, and carried.

The next order of business was the election of one member of the Board of Trustees. Doctor Leininger stated the term of Dr. J. E. M. Thomson expired in 1953.

A motion was made by Dr. R. T. Van Metre, seconded by Dr. F. A. Mountford, that Doctor Thomson be reelected. The motion carried.

Doctor Leininger stated the term of Dr. R. B. Adams on the Medicolegal Advice Committee expired in 1953.

A motion was made by Dr. W. E. Wright that Doctor Adams be reelected as a member of the Medicolegal Advice Committee. The motion was seconded by Dr. J. C. Waddell and carried.

Nominations for a member of the Council on Professional Ethics to replace Dr. J. R. Kleyla, whose term was expiring, were called for by the chair.

A motion was made by Dr. W. E. Wright, seconded by Dr. F. A. Mountford, that Doctor Kleyla be elected to succeed himself. The motion carried.

Doctor Leininger read letters from the county societies recommending Life Memberships for the following physicians:

Adams County—J. P. Feese, M.D., Hastings

Nance County—Homer Davis, M.D., Genoa

Thayer County—V. D. Douglas, M.D., Carelton

Omaha-Douglas—D. T. Quigley, M.D., Omaha; C. C. Tomlinson, M.D., Omaha; Geo. F. Simanek, M.D., Omaha; Chas. J. Nemec, M.D., Omaha

A motion was made by Dr. R. T. Van Metre, seconded by Dr. F. A. Mountford, that the Board of Councilors recommend to the House of Delegates that Life Membership be granted to Dr. J. P. Feese. The motion carried.

A motion was made by Dr. W. E. Wright that the Board of Councilors recommend to the House of Delegates that Life Membership be granted to Dr. Homer Davis. The motion was seconded by Dr. J. C. Waddell and carried.

A motion was made by Dr. Wm. McGrath that the Board of Councilors recommend to the House of Delegates that Life Membership be granted to Dr. V. D. Douglas. The motion was seconded by Dr. W. C. Kenner and carried.

A motion was made by Dr. F. A. Mountford, seconded by Dr. W. C. Kenner, that the Board of Councilors recommend to the House of Delegates that Life Membership be granted to Dr. D. T. Quigley. The motion carried.

A motion was made by Dr. W. E. Wright, seconded by Dr. R. T. Van Metre, that the Board of Councilors recommend to the House of Delegates that Life Membership be given to Dr. C. C. Tomlinson. The motion carried.

A motion was made by Dr. W. C. Kenner that the Board of Councilors recommend to the House of Delegates that Life Membership be granted to Dr. George F. Simanek. The motion was seconded by Dr. R. R. Brady and carried.

A motion was made by Dr. W. C. Kenner, seconded by Dr. W. E. Wright, that the Board of Councilors recommend to the House of Delegates that Life Membership be given to Dr. Chas. J. Nemec. The motion carried.

A motion was made by Dr. W. E. Wright, seconded by Dr. J. C. Waddell, that the meeting adjourn. The motion carried.

May 13, 1953

The second session of the Board of Councilors was called to order by Dr. Earl Leininger, Chairman, at 9:30 a.m. in Parlor C, Hotel Paxton, Omaha, Nebraska.

The following members were present: Drs. Paul S. Read, W. C. Kenner, J. C. Waddell, W. E. Wright, R. T. Van Metre, Robert Harry, F. A. Mountford, R. R. Brady, Wm. M. McGrath, Earl F. Leininger, and Frank Herhahn.

Also present were: Drs. R. B. Adams, Secretary-Treasurer; J. D. Bradley, Speaker, House of Delegates; Fay Smith, Board of Trustees; J. D. McCarthy, and Mr. M. C. Smith, Executive Secretary.

The minutes of the first session were read by Dr. Paul S. Read and were approved as read.

A letter of resignation from Dr. Earle G. Johnson, Chairman of the Board of Trustees, was read by the chair.

A motion was made by Dr. F. A. Mountford, seconded by Dr. R. R. Brady, that Doctor Johnson's resignation be accepted. The motion carried.

Nominations were called for to fill the unexpired term of Doctor Johnson as a member of the Board of Trustees.

Dr. A. A. Ashby, Geneva, Nebraska, was nominated.

A motion was made by Dr. F. A. Mountford, seconded by Dr. Robert Harry, that the nominations be closed and Doctor Ashby be declared the unanimous choice of the Board of Councilors as a member of the Board of Trustees. The motion carried.

Letters of appreciation were read by Doctor Leininger from Mrs. Harold Prince and Mr. Neil C. Vandemoer.

Doctor Adams read a resolution from Christian G. Krupp, B.Sc., M.D., relative to voluntary health insurance. No action was taken.

New business was called for but none was presented.

A motion was made to adjourn. The motion was seconded and carried.

May 14, 1953

The final meeting of the Board of Councilors was called to order by Dr. Earl F. Leininger, Chairman, at 9:40 a.m., in Parlor C, Hotel Paxton, Omaha, Nebraska.

The following members were present: Drs. Paul S. Read, W. C. Kenner, J. C. Waddell, W. E. Wright, Robert Harry, F. A. Mountford, R. R. Brady, Wm. M. McGrath, Earl F. Leininger, and Frank Herhahn.

Also present were Drs. R. B. Adams, J. D. Bradley, and J. E. M. Thomson.

The minutes of the previous session were approved as read.

The chair called for any unfinished or new business, but none was presented.

Doctor Leininger expressed his appreciation for the cooperation extended him during his chairmanship of the Council, and stated it was his understanding that this body would reorganize at their next meeting in February 1954.

Doctor Leininger declared the Board of Councilors adjourned until the February meeting.

DOCTOR . . . Please take each copy of your Journal home. The wives complain that they never get to read the Auxiliary column.

CONSTITUENCY OF HOUSE OF DELEGATES ANNUAL SESSION, NEBRASKA STATE MEDICAL ASSOCIATION

May 11, 12, 13 and 14, 1953

	Sessions			
	1st	2nd	3rd	4th
ADAMS—				
G. Paul Charlton, Hastings (D)		P	P	
George Pinney, Hastings (A)				
BOONE—				
J. E. Davis, Albion (D)			P	
BOX BUTTE—				
W. L. Howell, Hyannis (D)	P	P	P	P
J. F. Kennedy, Alliance (A)				
BUFFALO—				
Wm. Nutzman, Kearney (D)	P	P	P	P
D. A. Nye, Kearney (A)				
BURT—				
R. H. Tibbels, Oakland				
L. E. Sauer, Tekamah (A)				
BUTLER—				
L. J. Ekeler, David City (D)				
D. E. Burdick, David City (A)				
CASS—				
R. R. Andersen, Nehawka (D)		P	P	
CEDAR, DIXON, DAKOTA, THURSTON and WAYNE—				
Roy Matson, Wayne (D)	P	P	P	P
Walter Benthack, Wayne (A)				
R. P. Carroll, Laurel (D)		P		
H. J. Billerbeck, Randolph (A)				
Max Coe, Wakefield (D)	P	P		
A. A. Larson, So. Sioux City (A)				
CHEYNNE, KIMBALL, DEUEL—				
James E. Thayer, Sidney (D)			P	P
C. B. Dorwart, Sidney (A)				
CLAY—				
Wm. Berrick, Edgar				
H. V. Nuss, Sutton (A)	P	P		
COLFAX—				
H. D. Iyers, Schuyler (D)				
L. C. Kavan, Schuyler (A)				
CUSTER—				
R. D. Bryson, Callaway (D)	P	P	P	P
G. T. Erickson, Broken Bow (A)				
DAWSON—				
Ray S. Wycoff, Lexington (D)	P	P	P	P
A. W. Anderson, Lexington (A)				
DODGE—				
Robert C. Reeder, Fremont	P	P	P	
D. B. Wengert, Fremont (A)				
FILLMORE—				
A. A. Ashby, Geneva (D)		P		P
V. V. Smrha, Milligan (A)				
FRANKLIN—				
L. S. McNeill, Campbell (D)	P	P	P	P
W. A. Doering, Franklin (A)				
FOUR COUNTY—				
Paul R. Martin, Ord (D)	P			
Otis W. Miller (A)				
GAGE—				
V. L. Branson, Beatrice (D)				
H. D. Runty, DeWitt (A)	P	P	P	P
GARDEN-KEITH-PERKINS—				
John McFee, Ogallala (D)				
Willard Seng (A)	P	P	P	P
HALL—				
L. E. Imes, Grand Island (D)				
C. H. Maggiori, Grand Island (A)				
HAMILTON—				
HARLAN—				
HOLT and NORTHWEST—				
Wilber Johnson, Valentine (D)				
Thomas Deakin, Valentine (A)				
HOWARD—				
J. Y. Racines, Palmer				
M. O. Arnold, St. Paul				
JEFFERSON—				
JOHNSON—				
L. J. Chadek, Tecumseh (D)				
W. R. Miller, Sterling (A)				
LANCASTER—				
E. W. Hancock, Lincoln (D)	P	P	P	P
E. E. Angle (A)				
W. W. Carveth, Lincoln (D)	P	P		P
H. V. Munger (A)				
E. S. Wegner, Lincoln (D)				
R. E. Garlinghouse (A)	P	P	P	P
J. T. McGreer, Jr., Lincoln (D)	P	P	P	P
J. C. Peterson (A)				
LINCOLN—				
A. J. Callaghan, North Platte (D)				P
L. F. Valentine, North Platte (A)				
MADISON SIX—				
G. B. Salter, Norfolk (D)				
A. C. Barry (A)				
H. S. Tennant, Stanton (D)				
J. D. Reid, Pilger (A)				
R. H. Kohtz, Bloomfield (D)	P			P
S. R. Neil, Niobrara (A)				
A. E. Maillard, Osmond (D)	P			
M. A. Johnson, Plainview (A)				
I. L. Thompson, West Point (D)		P		
W. D. Hansen, Wisner (A)				
E. E. Curtis, Neligh (D)	P		P	
W. W. Graham, Elgin (A)				
MERRICK—				
NANCE—				
NEMAHA—				
Edgar Cline, Auburn (D)				
R. C. Fenstermacher, Auburn (A)				
NORTHEAST NEBRASKA—				
A. J. Courshon, Chadron (D)				
H. V. Crum, Rushville (A)			P	
NUCKOLLS—				
C. T. Mason, Superior (D)	P	P		P
Byron L. Brown, Superior (A)				
OMAHA-DOUGLAS—				
Paul S. Read, Omaha (D)				
Sam Swenson, Jr. (A)		P		P
R. J. Fitzgibbons, Omaha (D)		P	P	P
Raymond J. Wyrens (A)				
J. B. Christensen, Omaha (D)	P	P	P	P
Jos. F. Gross (A)				
Leroy W. Lee, Omaha (D)	P	P	P	P
Leo V. Hughes (A)				
James D. Bradley, Omaha (D)	P	P	P	P
Maurice E. Stoner (A)				
Donald J. Bucholz, Omaha (D)	P	P	P	P
John H. Brush (A)				
Richard J. Egan, Omaha (D)	P	P	P	P
Floyd C. Nelson (A)				
A. J. Offerman, Omaha (D)	P	P	P	P
Frank J. Mnuk (A)				
OTOE—				
D. D. Stonecypher (D)	P	P	P	P
J. P. Gilligan (A)				
PAWNEE—				
H. C. Stewart, Pawnee City (D)				
A. B. Anderson, Pawnee City (A)				
PHELPS—				
H. A. McConahay, Holdrege (D)	P	P	P	P
Walter Reiner, Holdrege (A)				
PLATTE—				
E. E. Koebbe, Columbus (D)	P	P	P	P
C. H. Campbell (A)				
POLK—				
RICHARDSON—				
W. E. Shook, Shubert (D)	P	P	P	P
S. D. Cowan, Falls City (A)				
SALINE—				
L. W. Forney, Crete (D)			P	P
Paul Huber, Crete (A)				
SAUNDERS—				
W. W. Noyes, Ceresco (D)				
M. E. Lathrop, Wahoo (A)				
SCOTTS BLUFF—				
Douglas Campbell, Scottsbluff (D)	P	P	P	P
Kenneth Ohme, Mitchell (A)				
SEWARD—				
C. F. Nille. Beaver Crossing (D)		P	P	
W. Ray Hill, Milford (A)				
SOUTHWEST NEBRASKA—				
F. M. Karrer, McCook (D)		P	P	P
THAYER—				
Louis C. Bunting, Hebron (D)				
R. E. Penry, Hebron (A)				
WASHINGTON—				
Morris Nielsen, Blair (D)	P	P	P	P
WEBSTER—				
YORK—				
H. O. Bell, York (D)			P	P
R. E. Harry, York (A)				
Fritz Teal, M.D., Vice Speaker	P	P	P	P

Many physicians are reluctant to believe that people can have pulmonary tuberculosis when they show no clinical symptoms and there is nothing to direct attention to their lungs except a shadow on a chest film. The tendency is to reassure the patient that the lesions are old and inactive, but the tragedy comes later when the same patient is found to have moderately or far advanced disease. (Alan L. Hart, M.D., Public Health Reports, December, 1952).

Nebraska State Department of Health

LABORATORY TESTS AND THE DIAGNOSIS OF SMALLPOX

Not too many years ago the job of distinguishing smallpox from other exanthematous diseases was one frequently confronting the Medical practitioner in Nebraska. In some instances symptoms were sufficiently definite that a diagnosis of smallpox went unquestioned. In other instances symptoms were milder and diagnostic signs less definite. Lack of agreement between medical men was common. Because of lesser legal restrictions, a diagnosis of "chickenpox" was definitely more popular than one of "smallpox." Because of the tendency to favor a diagnosis of chickenpox, the milder of the two diseases, and because of its prevalence, "chickenpox" was the usual diagnosis in children. The same attitude might have prevailed in the case of exanthamatous disease of adults except for resistance on the part of health departments. A common health department practice was to honor no diagnosis of chickenpox in an adult over sixteen years of age, or in a younger individual having a definite history of chickenpox. This practice led to extensive vaccinations and its practical soundness is evidenced by the fact that smallpox is now a rare disease.

Recently, cases of exanthematous disease showing some smallpox-like symptoms have been occurring. Both children and adults have been involved and cases have occurred in persons having a history of chickenpox. Some of the infected persons had previously been vaccinated; however, no cases have been encountered in individuals who had been successfully vaccinated within five years prior to exposure. In most cases the clinical evidence suggested either smallpox or chickenpox. The severity of the illnesses was generally slight or moderate. In cases where conflicting diagnostic evidence is present, older physicians appear to have a greater tendency to diagnose smallpox than do younger ones. With cases such as these it might seem impossible to distinguish, on a clinical basis, infections caused by the smallpox virus. This has been true in years past because laboratory facilities to aid in diagnosis were not then available. However, they are becoming available now and their proper use can greatly aid the clinician in making valid diagnoses.

Lack of specific therapeutic measures may make a definite diagnosis unimportant to the individual patient. The physician is remiss, however, who is not actively aware of the broader aspects of the presence of a communicable disease such as smallpox in the community in which he practices.

The subject of laboratory evidence of various communicable diseases was discussed by the author in the September 1952 Nebraska State Medical Journal. For smallpox the recommendations were:

(1) "Laboratory identification of smallpox virus in material from skin lesions" and (2) "Rise in titre of blood antibody content occurring during clinical disease." The second of these will be discused first. This is a method of general applicability in virus and rickettseal diseases for which antigenic material is available. Such laboratory procedures may also be used advantageously to aid in the diagnosis of bacterial diseases in which antibody titre has significance. The test requires two separate blood specimens. The first is taken early in the course of the disease. The object is to obtain a blood specimen before an appreciable rise in antibody titre has taken place. This specimen is sent to the laboratory where the serum is separated and held in a frozen condition until the second specimen is received which is taken after the disease has run its course and after sufficient time has elapsed to allow the blood antibody content specific for the disease to have reached a high level. As soon as the laboratory receives the second specimen the two specimens are titred in parallel for antibody content. A definite rise in titre of the convalescent stage specimen as compared to the first specimen is considered of significance. Usually a rise of fourfold or greater is considered a definite increase.

Although methods of antibody titration involving hemagglutination have been used, most commonly the complement fixation test employing a vaccinal antigen is used. A negative antibody titre (no appreciable rise in titre) has considerable value in indicating that the infection was not caused by the smallpox virus. A positive antibody titre rise as described above has considerable significance in indicating an antibody response either to smallpox virus, to cowpox virus or to vaccination. No difficulty should be encountered in distinguishing clinically between these conditions. The rise in titre test has the disadvantage in that the results are available only late in the disease, too late to do much about it and at a time when the interest of the patient and usually that of the attending physician, is low.

Several methods of laboratory identification of smallpox virus have been employed. The three of these that appear to have greatest practical value will be briefly described.

1. Inoculation of Rabbit Cornea:

The material from vesicles, papules, pustules or the dried crusts of older lesions is required. After cleaning the skin lesions with ether, the liquid contents of several lesions are collected in a capillary tube and the ends sealed with wax; several dried crusts may be collected in a sterile tube or on a scalpel edge. A sterile cotton swab may also be used to collect material from a pustule or to pick up scrapings from the base of a macule. The material should be promptly delivered to the laboratory. If delay of over a few hours is necessary it should be refrigerated. After suitable preparation, this infectious material is inoculated into light incisions on the surface of a rabbit's cornea. Suitable controls are used.

A specific keratitis, possessing a number of crateriform lesions along the line of inoculation occurring within 48 to 72 hours is characteristic positive. In many cases there also will be a diffuse corneal cloudiness. To complete the test the eye is removed, sectioned, stained and examined for Guarniere bodies.

A negative test is not conclusive for as many as half of the cases of smallpox may give negative results. Validity of the positive is somewhat dependent on the competence of the individual identifying the inclusion bodies.

Presence of keratitis, pit-like lesions along the line of inoculation and the presence of acidophilic inclusion bodies in epithelial cells or the proliferating edge of these corneal pits can be considered good laboratory evidence of smallpox.

2. Virus Identification by Complement Fixation Test:

Material collected from skin lesions by the same method as for inoculation studies of rabbit cornea can be used for virus identification by complement fixation. Because live virus is not essential, precaution of speedy transportation to the laboratory or refrigeration becomes less necessary. However, more of this antigenic material is needed, thus a greater amount of material must be collected.

In addition to this material from the patient, the laboratory must be equipped for making complement fixation tests and hyperimmune antivaccinal rabbit serum is also necessary. This serum is not available commercially and it is usually necessary for the laboratory to prepare it in advance by rabbit immunization. After the immune serum has been prepared, it may be preserved for long periods by mixing it with an equal volume of neutral glycerine and storing it under refrigeration.

The antigen used for the laboratory test is prepared from the material taken from the skin lesion of the patient and four hour icebox fixation is usually employed. If complement is fixed by this antigenic material and the immune rabbit serum the test is considered positive. Adequate controls are essential. In the hands of a competent serologist a 'positive' is good evidence that the specimen contained smallpox virus, cowpox virus or vaccina virus. Usually the clinician will have no difficulty in distinguishing betwen these. A 'negative' complement fixation is also of value in indicating the absence of such viral agents in the material tested.

After a laboratory has prepared the proper materials and has become proficient in running the test, results should easily be possible within 24 hours of the receipt of the specimen. Reliability of this test should be about equivalent to that of other so-called diagnostic tests such as serological tests for syphilis.

3. Inoculation of Chick Embryo:

Viral material similar to that used for rabbit corneal inoculation is used as a source of vivable cultural material. After suitable preparation, inoculations are made into the chorioallantoic membranes of 10 or 11 day old chick embryos. Uusually three or more dilutions of the suspected material are used. Several embryos should be inoculated with each dilution. After three days incubation the eggs are opened and membranes removed for inspection.

In case growth has occurred, some information results from the type of growth. If a virologist has had sufficient experience and if the disease process is characterized by a papulovesicular eruption then a laboratory diagnosis of "infection with a variola—vaccine virus" can properly be made.

Chick embryo cultures furnish an abundance of material so that complement fixation or other tests, similar to those made from viral material from skin lesions, may be undertaken.

DISCUSSION AND SUMMARY

The vaccina-variola group of viral agents have been subjected to extensive study and research in many laboratories. For practical reasons, information in detail of published results of such studies has been omitted. Most of the types of technics that have been used in other fields of virology have, with some degree of success, been applied to this group of viruses. In addition to the items that have been discussed herein are precipitation tests, studies of elementary bodies, technics employing hemogglutination, protection tests and use of the ultramicroscope. Accordingly it appears that no group of viral agents offer more possibilities for laboratory study than this one.

Many illnesses characterized by skin eruptions of a papillomatous nature are not capable of being diagnosed definitely on a clinical basis. Degree of severity is an unsafe guide. Symptomatology is confusing. It is believed that considerable aid in diagnosis can be furnished through laboratory services. Especially promising are the complement fixation test with specimens from skin lesions, complement fixation tests on paired blood specimens and isolation studies using chick embryos.

L. O. VOSE,
Division of Laboratories,
State Department of Health,
Lincoln, Nebraska.

Know Your Blue Shield Plan

Dr. Harry A. Jakeman, Fremont, has been named Chairman of the Prepayment Medical Care Committee of the Nebraska State Medical Association. He succeeds Dr. Orvis A. Neely, Lincoln, who resigned from the committee after one year as Chairman and several years as a committee member. Dr. Frank H. Tanner, Lincoln, was appointed to the committee, and Dr. John H. Brush, Omaha, was re-appointed. This committee serves as the liaison group between the Nebraska State Medical Association and the Blue Shield Board of Directors.

If patients ask, "Is polio covered by Blue Cross-Blue Shield?", the answer is "Yes." All regular membership benefits are provided to members and their eligible dependents who are hospitalized for polio. Blue Cross provides membership benefits in the hospital for 90 days. Blue Shield pays $4 per day for the physician's hospital visits for 90 days, plus regular membership benefits for diagnostic procedures and surgery in the hospital. If hospitalization and corrective surgery are necessary later, benefits included in the membership agreement are provided.

The names of the doctors who signed as Participating Physicians since January 1 are included in the June 1 edition of the Roster of Blue Shield Participating Physicians. This listing, which includes the names of 1,025 Nebraska doctors, is being offered to each of the 35,000 direct-pay members of Blue Cross-Blue Shield. Approximately one in four of these non-group subscribers are requesting a copy of the Roster. The Group Leader of each of the 3,500 employee groups over the state received a copy of the listing early this year.

Payments made by Blue Cross and Blue Shield for hospital and medical care of members during the first three months of this year greatly exceeded the amounts paid during any previous three-month period in the history of either Plan. Blue Cross payments to hospitals in the first three months of 1953 totaled $701,100 for 10,640 cases, and Blue Shield paid physicians $495,998 for 17,064 services. It is estimated that the total payments by the two Plans will approach $5,000,000 during the current year.

Reminder: The data pertaining to the history of the case is essential to the processing of a Blue Shield service report. Insufficient, erroneous or conflicting information causes embarrassment, delay and extra work for all concerned—the doctor, the patient, and Blue Shield.

If you have ever wondered why Blue Shield does not pay for some medical services, please turn to page 238 of this issue of your JOURNAL. You will find in Dr. Glen E. Peters' article, "What Blue Shield Can't Pay—and Why" a clear explanation of why Blue Shield must include waiting periods, limitations and specific exclusions in the membership agreement.

The recommendations of three medical specialty groups were presented to the Blue Shield Professional Service Committee at a meeting held in Omaha on May 10. Representatives of Anesthesiologists, Pathologists and Ophthalmologists presented their views and proposals as regards Blue Shield coverage and benefit payments. Drs. Robert C. Therien and Frank Cole were spokesmen for Anesthesiologists, Drs. Frank H. Tanner and Miles E. Foster, Jr., presented the recommendations of Pathologists, and Dr. W. H. Morrison represented Ophthalmologists. The Professional Service Committee was organized recently to hear, study, and consider the adoption of suggested changes in the Blue

Shield membership agreement and fee schedule. Through this committee, specialty groups and individual physicians may present their recommendations relating to Blue Shield. Members of the committee are: Dr. Donald B. Steenburg, Chairman, Dr. J. Jay Keegan, Dr. Arthur J. Offerman, Dr. Glen E. Peters, and Dr. Paul S. Read.

Human Interest Tales

Communications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. Kenneth Pierson, Neligh, has moved into his new office quarters.

Dr. and Mrs. Nyel Moss, Arcadia, were honored at a community reception on April 29.

Dr. W. Ray Hill, formerly of Milford, is now practicing with Dr. J. T. Stanard, in Seward.

Dr. J. R. Paul, Lincoln, was recently named a fellow of the American Psychiatric Association.

Dr. Charles T. Streeter, Bertrand, and Miss Roberta Anderson were married in Hastings, May 17.

Dr. J. B. Christensen, Omaha, is the new secretary of the Omaha-Douglas County Medical Society.

Dr. M. B. Francis, Bellevue, spoke to the Betz School P-TA, May 4, on methods of preventing polio.

Dr. C. G. Muffly, Pender, and the former Miss Mary Joan Connealy of Gordon, were married May 29 in Tekamah.

Dr. Floyd Ring, Omaha, spoke to the local Cosmopolitan Club, June 9, on the topic of treatment for the mentally ill.

Dr. Carl Barr, Tilden, has returned from Chicago where he attended a two-week postgraduate course at the Cook County Hospital.

Drs. Hodson Hansen and Lucian Blattspieler of Lincoln, were voted membership in the Lancaster County Medical Society in May.

Dr. R. C. Fenstermacher, who recently moved from Auburn to Nebraska City, just completed a refresher course at the Mayo Clinic.

Dr. W. M. Fitch, Albion, has been recalled to active duty as a Naval Reserve officer. He is stationed at Camp Pendleton, California.

Dr. G. Lee Sandritter, Hastings, presented a paper before the local Kiwanis Club on May 7. His title was 'To Treat, or to Keep, Patients."

Dr. H. S. Eklund and Dr. R. E. Klass, both of Osceola, were recently appointed by the city council as directors of the Osceola Hospital Board.

Dr. D. B. Steenburg, Aurora, is the new president of the Nebraska Chapter of the American College of Surgeons. He succeeds Dr. Herbert Davis of Omaha.

Dr. Edwin J. Loeffel, formerly of Gering, was released from the Army on May 9 after spending 12 months in Korea. On June 1 he opened his new office in Mitchell.

Through the Journal, members of the Nebraska State Medical Association extend their deepest sympathy to Dr. J. P. Gilligan, Nebraska City, on the death of his wife.

Dr. C. H. Sheets, Cozad, returned home in May from an extended trip to Chicago. He reports that his hands are getting along well following surgery on them in February.

Dr. Edwin Davis, Jr., Omaha, plans to leave, during the first part of July, for Philadelphia where he will take a two-year residency at the Philadelphia General Hospital.

Drs. Frederick S. Webster, Howard Mitchell and Paul Goetowski, all of Lincoln, presented the scientific program at a meeting of the Lancaster County Medical Society on May 19.

Dr. and Mrs. A. J. Schwedhelm and family of Norfolk, are on a two-month's tour of Europe. They plan to visit England, Belgium, Holland, Germany, Frances, Switzerland and Italy.

Dr. J. B. Redfield, North Platte, has been named the city's health officer for a two-year term. Doctor Redfield was also recently elected president of the North Platte Memorial Hospital staff.

According to The Schuyler Sun, Dr. Donald Bendorf was to begin practice with Dr. L. C. Kavan in Schuyler on July 1. Doctor Bendorf is a graduate of the Creighton University School of Medicine.

Dr. W. Joseph McMartin, Omaha, has been elected president-elect of the American Urological Association. His father, Dr. Charles McMartin, Omaha, was president of the same organization in 1947.

Dr. Warren G. Bosley, Grand Island, attended an area meeting of the American Academy of Pediatrics in Boston in April. While in the East, he spent a week at the Babies Hospital in New York City.

Dr. and Mrs. A. W. Anderson, West Point, are vacationing in Europe. Doctor Anderson planned to spend a good deal of his time visiting hospitals and touring agricultural areas of several European countries.

Dr. M. M. Sullivan, Spalding, has returned home after touring the Southern States. While enroute home he suffered a heart attack and was hospitalized at Carroll, Iowa. He is reported to be getting along fine.

Dr. Harold N. Neu, head of the department of medicine and Dr. J. Raymond Johnson, head of the department of physiology, Creighton University School of Medicine, have just returned from the University of Pennsylvania where they attended a seminar on pulmonary physiology.

Dr. Fay Smith, Imperial, was honored by his local Masonic Lodge on May 4. Doctor Smith was elected Grand Master of Masons in Nebraska at their annual meeting in Omaha last month. During the past year he has served as Deputy Grand Master. He will be head of the order in Nebraska for one year.

Dr. James F. Kelly, Omaha, president of the Nebraska State Medical Association, and Dr. Thomas D. Fitzgerald, Omaha, assistant dean of the Creighton University School of Medicine, were honored guests at a meeting of the Pottawattamie County Medical Association in Council Bluffs, Iowa, on May 25.

Dr. Clarence Brott, Beatrice, has been elected president-elect of the Nebraska Chapter of the American Academy of General Practice. He succeeds Dr. Frank Mnuk, Omaha, who has become president. Other officers elected during the annual business meeting in May were: Dr. Herbert Kuper, vice president, Columbus; Drs. A. A. Ashby, Geneva, and Charles Murphy, Omaha, directors; and Dr. Harvey Runty, delegate, Dewitt. Dr. John Brown of Lincoln is the retiring president.

Dr. Bryan M. Riley, Omaha, was awarded an Alumni Achievement Citation by Creighton University at its Commencement Exercises on June 4. The citation read: "This citation is conferred on Bryan M. Riley, graduate of Creighton University School of Medicine, for his long and honorable career as a physician in the Omaha community, in recognition of his many contributions to civic and to medical societies, and to professional publications; and, above all, it is given as a token of both esteem and gratitude in recognition of the long, loyal and self-sacrificing service which Doctor Riley rendered to The Creighton University as Dean of its School of Medicine at a time in the history of that school when the problems were great and the reward but small."

PITFALLS IN UROLOGICAL DIAGNOSIS

(Continued from page 253)

simple and effectual check, as evidenced by results. I hesitate to confess how many incipient errors, through the years, have thus been nipped in the bud.

There is also the lost sponge hazard, and the worry resulting from the mis-counted sponge pack, in which we are almost wholly at the mercy of the nurses. One is not far wrong in the statement that, in any large surgical practice, the question is not whether sponge trouble will turn up, but when. But this is another story.

Although it must be recognized that, where human frailty enters in, a certain percentage of error is inevitable. This percentage may be reduced to a small minimum by eternal vigilance, and by checking and rechecking, bearing in mind that the slip foreseen is the slip prevented.

LIFE EXPECTANCY WILL INCREASE

Americans can expect to add four to five years to their average length of life during the next twenty or twenty-five years, according to Dr. Louis I. Dublin, eminent statistician.

Addressing the Eastern Life Claim Conference, a group of life insurance claim experts, at a luncheon meeting today at the Hotel Statler in New York, Dr. Dublin said that an average length of life of seventy-three years was very likely within this generation. Females would enjoy about three years more than this national average.

"During the past half-century, life expectation at birth has jumped from about forty-nine years to the present sixty-nine years," Dr. Dublin said. "That was in large part the result of great reductions in the mortality among infants, children, and young adults. Longevity at the middle ages and at the advanced ages has not gained materially in the recent past. But today, with research concentrated on the ills which beset later life, there should be material advances in the years ahead in life expectancy in mid-life and later."

Great changes have taken place over the past half-century in the distribution of deaths by cause, according to Dr. Dublin. At the turn of the century primary emphasis was on tuberculosis, pneumonia, communicable diseases of childhood and accidents. Today, deaths from these conditions have been greatly reduced in number, and the chief concern is over heart disease, cancer, accidents and cerebral hemorrhage.

"As a result, millions of people are now alive who would have been dead under the conditions of fifty years ago," he added. "These survivors have added greatly to the size of our population, have increased our productivity, and have strengthened the defensive power of the nation. Gains made in the public health are of great social and economic importance. They are particularly significant to the life insurance industry. They have reduced the amount of claim payments which would otherwise have occurred, and they have made possible the wide spread of life insurance among the people. That is why the life insurance industry is increasingly concened with these matters today.

"While changes as sweeping as those of the past half-century are not likely to occur in the years ahead, important gains can nevertheless be won, provided industry and business as well as the individual citizen learn how to use the discoveries that the research men are making in the medical and health laboratories."

The life insurance business which is so closely related to the public interest, Dr. Dublin pointed out, is exploring the possibilities for greater cooperation with those who are more directly concerned with advancing the public health. Through the Life Insurance Medical Research Fund, to which five million dollars has already been allotted by the life insurance companies, important contributions to the understanding of heart disease have been brought about.

Dr. Dublin also cited the present plans in the health and welfare field of the Institute of Life Insurance, to which he recently became consultant. It is hoped through these efforts that those engaged in the life insurance business will be further encouraged to participate in various activities directed at raising the health and living standards of the American people.

Mid-morning let-down is largely psychological and not attributable to a breakfast high in starches and sugar.

Tuberculosis Abstracts

SOME URGENT PROBLEMS IN TUBERCULOSIS

Now that the excitement has abated over the "miracle drugs," the Isonicotinic acid hydrazides (which one had vainly hoped would settle our problems in tuberculosis once and for all), we must again settle down to treating the disease by all available means. There is a widespread tendency to belittle the task ahead since there is little appreciation of the true size and complexity of the problems facing us. It is often said that with the addition of the new drugs effective against the tubercle bacillus, our task has been greatly simplified. The fact is that with every step of advance new problems arise which must be solved before the new advance can be utilized properly. This is true also for Isonicotinic acid hydrazides. We know now that these drugs are useful agents effective against tubercle bacilli, but by now we also know that they fall far short of the cure of the disease. To make proper use of them we must first solve the problem of how they can best be fitted into our present scheme of treatment. This is a problem of no small proportion and it is one of great urgency. We clinicians must find as soon as possible, answers to several questions:

1. Should the drugs be reserved for patients who have become resistant to Streptomycin (S.M.) and Para-amino-salicylic acid (P.A.S.)?
2. Should the drugs be used at the start in combination with S.M.; or with S.M. and P.A.S.?
3. What are the optimal dosages and optimal durations of treatment for the combinations of the drugs?
4. Can these combinations be used intermittently —at long intervals and in minimal dosage—for many years to render and keep tubercle bacilli in the body permanently nonviable?

Attempts to answer these questions have of course been started. From experimental studies some guide-posts have emerged. The new drugs best designated as "synthetics" (in contrast with Streptomycin which is an antibiotic) are definitely not as effective against tubercle bacilli as is S.M. Resistance to synthetics emerges sooner than to antibiotics. However, the synthetics have small molecular structure enabling them to penetrate into the depth of necrotic lesions and can reach the bacilli at places where S.M. cannot. The synthetics are apparently mostly devoid of such toxic effects as S.M. and P.A.S. possess when given in large quantities.

Obviously the answers to these questions will profoundly affect not only immediate treatment but our entire scheme of tuberculosis control.

It will probably take years before the answers to these questions will be forthcoming. Until then the drugs are unfortunately being used widely in haphazard fashion. Current experience will therefore teach us chiefly how not to use them. As in the first period with the use of S.M., there will emerge a resultant large number of cases with resistant organisms. This leads us to our next major current problem, "the arrested case" of pulmonary tuberculosis.

THE ARRESTED CASE

When are residual lesions, that remain after chemotherapy, arrested? We no longer have the criterion of positive sputum to guide us. We are confused as to the question of the further treatment of these patients. Some strongly believe in the final surgical excision of all such lesions and are convinced that such is the only answer. Others believe that most of these lesions can be permanently healed medically and that excision is not needed. As in the past, so now, they are convinced that such lesions can be left for the body to hold under control by its own biological forces, and that the risk of major operation for the removal of such residues is not justified.

How many of these lesions will flare up again? Obviously only long range observation will answer that question. Even if we decided that all such lesions should be removed, it would not be practical to do so. First, the number of these cases is by now so large that we practically lack the facilities to operate on all of them. Second, it is quite unlikely that more than a minority could be persuaded to submit to the operation. Most of these patients must be turned back sooner or later to their families and their jobs. Time alone will tell how many of them will relapse and how soon. This in turn brings up several questions:

1. How much of a source of new infection do these cases represent?
2. Are we physicians continually returning to the population sources of infection which keep tuberculosis morbidity persistently high?

HIGH MORBIDITY RATE POSES PROBLEM

The urgency of the answers is difficult to overemphasize. The most alarming feature of the present phase in tuberculosis is the persistently high morbidity. As our statisticians have recently repeatedly pointed out, the decline in the mortality from tuberculosis continues sharp. In contrast, the number of people with tuberculosis has tended to remain very high. The problems posed by persistently high morbidity are manifold and complex and serious. Mary Dempsey (Statistician of the National Tuberculosis Association) most recently stressed the continued magnitude of the public health problem. She sounded a warning against the tendency to belittle its seriousness. It seems that too much discussion in the lay press regarding current progress in tuberculosis has tended to mislead not only the lay public, but even large sections of the profession, into believing that tuberculosis is no longer a major health problem. We clinicians engaged in the management of the patients are now even more than ever troubled by the dangerous potentialities inherent in the so-called "arrested cases of tuberculosis" that are returned to their families and jobs. We are now especially faced with the problem as to how much control we should exercise over their lives.

All of these are urgent and serious problems. The answers to these questions must be worked out very carefully and will require considerable time.

—By Edgar Mayer, M.D., Health News, December, 1952.

One of the values of a community-wide mass survey is the disclosure of localities or groups in which there is a high prevalence rate where screening efforts may be concentrated. (Arthur C. Christie, M.D., J.A.M.A., January 10, 1953).

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EDITORIAL

SOCIALISM IN MEDICINE IS NOT DEAD

A Southern doctor made the headlines in the public press soon after the election of our new Administration, by stating that physicians could go back to the practice of medicine and stop worrying about socialized medicine. His statement drew widespread fire from the medical press. There was much medical editorial comment aimed at stimulating a continuing fight. There was a general feeling that we had won only an armistice and that the strong forces committed to socialistic ideas were by no means defeated. Now one can sense that medical public opinion is slowly veering in the direction of complacency in regard to this most important controversy. Even in the address of our own immediate past president (N.S.M.J., July, 1953) appears the statement that we have defeated socialized medicine. This attitude may have received a direct stimulus by the ease with which the House of Delegates of the A.M.A. was wheedled into supporting President Eisenhower's Reorganization Plan No. 1; but no matter why, this attitude is gripping the profession. It is not good.

It is not in keeping with the attitude of the American Medical Association, which so effectively fought socialized medicine to a temporary defeat, that we should have to be prodded now by politicians in order to restrain us from disbanding our forces and sitting back complacently to practice medicine with no worries about socialism. This reference is to an excellent article by former Representative Howard Buffett that appeared in Human Events in May and was also printed in the June 7 issue of the Omaha World-Herald. This article is entitled, "Backing Into Socialized Medicine." It should be read by every doctor who feels complacency coming on.

Mr. Buffett discusses only one phase of the wide field of socialism, as related to medicine, leaving out of account the powerful people and organizations that are committed to socialism. These people and these organizations still exist. While they are less vocal about their plans, because of the results of the recent elections, they are by no means "defeated." The following quotation expresses the main theme of Mr. Buffett's warning:

> "Nevertheless, we are edging toward socialized medicine, whether we want it or not. We are being dragged into it as a result of our attempt, since Pearl Harbor, to meddle in affairs of the world. We are backing into it by way of militarism."

Mr. Buffett then considers the situation created by twenty-odd million veterans who get medical care because of either service-connected or non-service-connected disability; the problem being created gradually by the conscription of 900,000 young males each year, for military service, and the medical care that we will "owe" them for life; the fact that, in a few years, nearly half the population of the United States, not including dependents, will "have a claim on Uncle Sam, M.D.;" that a larger and larger number of the young doctors are being siphoned into the Veterans Administration or into the armed forces, leaving an apparent doctor-shortage for the civilian population, even though the number of doctors is increasing much more rapidly than the population is growing; and, that many doctors who are taken into the armed forces immediately following training will not have known any type of practice excepting "bureaucratic medicine" and may come out of the service knowing better how to please their superior officers than how to please their patients.

Another paragraph of his article seems to express his wishful thinking about this aspect of socialized medicine: "Perhaps the solution of this problem lies with the doctors who know the dangers to medicine, both as a science and an art, in socialization . . . perhaps the young doctors can be taught that regimented medicine is bad for them and the country."

While Mr. Buffett has considered the military aspects of this problem, we should not lose sight of all its other aspects. Complacency will lose the peace after we have won the armistice.

WHY PICK ON DOCTOR HAWLEY

Publicity in the press of the Nation concerning ghost-surgery, unnecessary surgery, and fee-splitting incited a greater number of resolutions in the House of Delegates at the recent session of the American Medical Association in New York City, than any other single subject. All these resolutions were directed at Dr. Paul R. Hawley, and all sought censorial action against him because of his acts in releasing this information to the press. The large number of resolutions about this subject might be interpreted as a measure of these unethical practices within the medical profession.

It is a matter of common knowledge, within the profession, that these unethical practices, especially fee-splitting and unnecessary surgery are carried on all the time. There is no way, as a general rule, to be certain just how extensively the doctors in any one community are involved in these pernicious practices. It is known that they are more common and more wide spread in some parts of the Nation than in others. On the other hand we know that fee-splitting is practiced in our State. There is at least one fair sized town in Nebraska where fee-splitters have the surgical practice so well controlled that a young, well qualified surgeon had to make a choice: starve, leave, or split fees. How many more such combinations exist in our State is anyone's guess.

The reason that probably will be assigned for picking on Paul Hawley as a scapegoat will be that he is upsetting our public relations. As a profession we have tried very hard to build good public relations; but perhaps this is like trying to have a fine flower garden without going to the bother to keep the weeds out of it. We like to have the public believe that we practice medicine only for the good of our patients; that we are humanitarian in our fundamental thinking and action. It may be that far too many doctors hide behind the screen of "humanitarianism" while, in truth, they are practicing medicine on a purely commercial basis. These may be the weeds that spoil the garden of public relations.

Paul Hawley may have stumbled clumsily into the unfavorable limelight of doctor-public opinion, but it is almost a certainty that anyone in the profession who publicly opposes the pernicious practices that we are talking about will get the same verbal manhandling that Hawley is getting. Consider what happened to Loyal Davis. In the course of a conference, arranged between responsible members of the governing body of the College of Surgeons and the press, Davis said: "There is no question but that fee-splitting is on the increase in Chicago and surrounding areas." Because he made this statement Doctor Davis was severely criticized by the Chicago Medical Society. This society, of which he was a member, publicly censured him in the press. They brought charges against him in the society for (1) making statements for personal publicity advantages, (2) releasing misleading information, and (3) making statements detrimental to the entire medical profession. Strong backing of Doctor Davis by the public press of Chicago was probably responsible for the dropping of these charges, so that he remains a member in good standing in organized medicine. It is notable that the matter of the truth of the statements made by Davis was never considered by the Chicago Medical Society; the charges of "unethical conduct" related only to the fact that he spoke out about the evils in his profession.

Why, then, should we pick on Dr. Paul Hawley? Why not make a persistent effort to clear the weeds from our garden and thereby be deserving of the good public relations we so fervently desire?

Poliomyelitis: Report on the Epidemic In Omaha and Douglas County During the Year 1952

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Doctor Lyman presents to the reader an exposition of the largest epidemic of poliomyelitis known to have occurred in Omaha and Douglas County. The statistical data on this epidemic, in this area, are quite complete; and, the author contents himself with an interesting and instructive analysis of these facts. The drafting of any deductive conclusions seems to be studiously avoided.

EDITOR

TOTAL NUMBER OF CASES

During the year 1952, new cases of poliomyelitis among residents of Omaha and Douglas County, as reported to the Omaha-Douglas County Health Department, numbered 498. The greatest number of cases previously reported for any one year was 299, in 1948. Table I reveals the number of cases as reported each year since 1921.

TABLE I

MORBIDITY AND MORTALITY STATISTICS ON INFANTILE PARALYSIS IN OMAHA AND DOUGLAS COUNTY
1921-1952

A dash (__) indicates no data available.

Year	Cases	Deaths	Fatality Rate per 100 Cases
1921	5	--	--
1922	0	0	0
1923	58	0	0
1924	1	0	0
1925	7	--	--
1926	6	--	--
1927	21	--	--
1928	--	--	--
1929	2	0	0
1930	10	0	0
1931	8	0	0
1932	6	0	0
1933	3	0	0
1934	1	--	--
1935	1	--	--
1936	5	0	0
1937	110	23	20.9
1938	17	1	5.8
1939	12	2	16.6
1940	41	4	9.7
1941	0	0	0
1942	1	0	0
1943	57	8	14.0
1944	16	1	6.2
1945	41	3	7.3
1946	85	9	10.5
1947	49	4	8.1
1948	299	15	5.0
1949	182	15	8.2
1950	115	1	0.8
1951	91	4	4.4
1952	498	9	1.8

ATTACK RATE

The population of Douglas County, as estimated on June 30, 1952 was 290,748. This estimation is made by calculating the natural increase of population since the U. S. Census of 1950 and adding it to the census-figure. The natural increase is the number of births in excess of deaths during any given period.

The attack rate was 171 cases per 100,000 population. In considering poliomyelitis, 20 cases per 100,000 population has been arbitrarily set as the rate establishing an epidemic.

GEOGRAPHIC DISTRIBUTION

Fifty-three of the cases occurred among residents of Douglas County, outside Omaha; 445 of the cases were residents of Omaha. The attack rates according to residence are as follows: Omaha, 171.3 per 100,000 population; and, Douglas County, 170.9 per 100,000 population. The population for each area, as of June 30, 1952, is estimated as 259,752 and 30,996 respectively.

Within the City of Omaha, cases were fairly evenly distributed geographically as revealed in the accompanying map of the city and surrounding environs. Study of the map will reveal two points not immediately apparent. First, only one case was reported among residents of East Omaha, which is a part of Douglas County. The population of this area is not exactly known, but it is roughly estimated at 2,344. The area is one of substandard housing and very poor sanitation. Second, the even distribution of other cases throughout the city possibly produces higher attack rates in areas of better housing and better standard of living than in areas of poor housing and poor standard of living.

No pattern of spread could be determined.

DATE OF ONSET

The incidence of poliomyelitis by month was as follows:

January	1
February	0
March	0

April	0
May	0
June	7
July	140
August	186
September	138
October*	20
November	4
December	1
Not Specified	1
Total	498

SEX DISTRIBUTION

Of the 498 cases, 273 were males and 225 were females. The attack rates were 190 and 152 per 100,000 respectively. This is a reversal of the 1948 epidemic. Then, of the 299 cases, 140 were males and 159 were females.

AGE DISTRIBUTION

The highest incidence of the disease occurred in the 5-9 year group. This was followed by the 1-4 year group. Table II shows the distribution of cases by age group.

TABLE II

AGE AND SEX DISTRIBUTION OF POLIOMYELITIS CASES IN OMAHA AND DOUGLAS COUNTY TOGETHER WITH AGE SPECIFIC ATTACK RATES PER 100,000 POPULATION FOR 1952

Age	Total Cases	Attack Rate	Males	Attack Rate	Females	Attack Rate
Under 1 year	8	132	4	131	4	133
1- 4	110	457	72	591	37	312
5- 9	141	645	85	764	55	513
10-14	61	318	35	347	25	275
15-24	88	208	30	145	58	268
25-34	76	163	37	164	39	162
35-44	15	36	9	45	6	28
45-54	1	3	0	--	1	6
55-64	1	3	1	7	0	--
65+	0	--	0	--	0	--
Total	498	171	273	190	225	152

From Table II, it can be seen that males were attacked at an earlier age than females. The peak attack rate was very high and fell off rapidly. Females showed no such high peak and the rate did not fall off rapidly.

PARALYSIS

Paralysis of some degree was present in 225 of the cases at the time of report. Two hundred sixty-seven showed no paralysis at time of report and in 6 this datum was not specified. Of the 225 paralyzed, 61 were, at some time, placed in either a chest respirator or iron lung for variable periods of time.

DEATHS

There were 9 deaths. Of these, 5 were residents of Omaha and 4 of Douglas County. The Fatality rate was 1.8 per cent. Table III shows age and sex of patients who died.

TABLE III

DEATHS FROM POLIOMYELITIS BY AGE AND SEX—1952

Age	Males	Females	Total
4	1	1	2
5	–	1	1
8	1	–	1
13	1	–	1
16	1	1	2
23	–	1	1
40	1	–	1
Total	5	4	9

MULTIPLE CASES

Table IV shows the number of multiple cases of poliomyelitis occurring among familial contacts.

TABLE IV

SUMMARY OF MULTIPLE CASES AMONG FAMILIAL CONTACTS

Multiples	Possible Combinations Paralytic and Non-paralytic Cases	No. of Families Showing Multiple Cases	No. of People Involved
Double	PP	3	6
	PN	10	20
	NN	7	14
Subtotal		20	40
Triple	PPP	1	3
	PPN	1	3
	PNN	1	3
	NNN	0	0
Subtotal		3	9
Quadruples	PPPP	0	0
	PPPN	1	1
	PPNN	0	0
	PNNN	0	0
	NNNN	0	0
Subtotal		1	4
GRAND TOTAL		24	53

From this table, it is seen that, of 24 families, involving 53 individuals, having two or more cases of poliomyelitis, only 6 families, involving 14 individuals, had two or more cases of paralytic poliomyelitis.

A study of the secondary cases of poliomyelitis among families with two or more cases of poliomyelitis was made and the results are tabulated in Table V. Secondary cases were arbitrarily considered as those occurring on the eighth day or later, subsequent to the initial case in the family.

From Table V, it is seen that from a total of 29 primary cases of poliomyelitis, only ten

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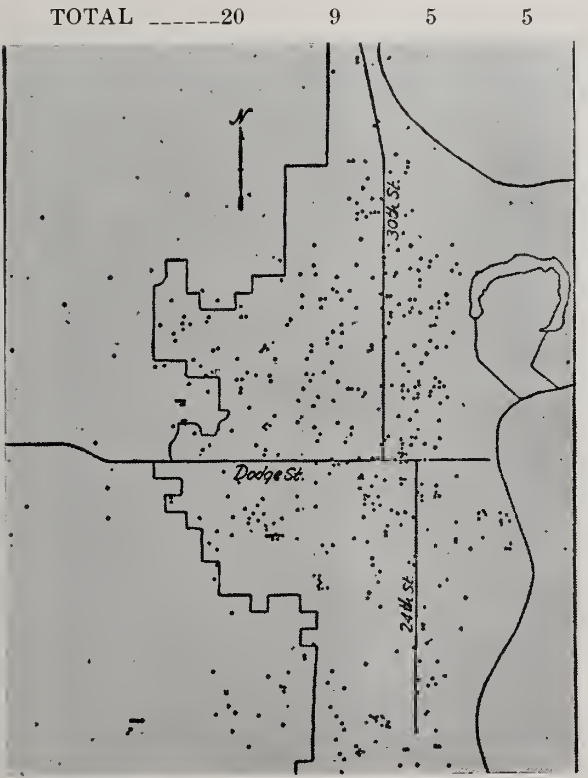
*The first frost of the year occurred October 5, 1952.

TABLE V

SUMMARY OF SECONDARY CASES OF POLIOMYELITIS AMONG FAMILIES HAVING TWO OR MORE CASES AT LEAST ONE OF WHICH WAS PARALYTIC

	Number of Cases			
Multiple	Primary Paralytic	Primary Non-Paralytic	Secondary Paralytic	Secondary Non-Paralytic
Double	12	6	4	4
Triple	5	2	1	1
Quadruple	3	1	0	0
TOTAL	20	9	5	5



Distribution of first 463 cases of poliomyelitis reported to Omaha-Douglas County Health Department in Omaha and immediate environs during 1952.

possible secondary cases resulted. Five of the secondary cases were non-paralytic. The five remaining secondary cases were paralytic. Three were secondary to non-paralytic cases, and two were secondary to paralytic cases.

The ages of the secondary cases were 35, 30, 40, 17, and 2 years, and were secondary to cases aged 8, 2, 8, 8, and 4 years respectively. Three secondary cases were parents of children, one was an older sister and one was a younger brother.

RACE

Of the total 498 cases reported, 481 were white; 17, Negro. No other race was reported. The attack rate for whites was 176 and for Negroes, 99 per 100,000 population.

PREGNANCY

Twelve cases of polio reported were in pregnant women. Three were in the first trimester; two, in the second; and five, in the third trimester. The trimester of pregnancy for two could not be learned.

HOSPITALIZATION

Of the 498 cases, 361 or 72 percent were hospitalized, and 137 or 28 percent were cared for at home. Seven of the Omaha hospitals received new patients still in the infectious stage.

Health Department records show hospitalization of new cases of poliomyelitis from Omaha and Douglas County as follows:

County Hospital	187
Children's Memorial Hospital	135
Veteran's Hospital	12
St. Joseph's	6
Clarkson	5
Methodist	5
Hattie B. Monroe	4
St. Catherine	1
Hospitals out of town	6
Total	361

Douglas County Hospital is primarily for the isolation of patients who reside in Omaha and Douglas County and who were in the contagious stage. As patients reached convalescence, most of them were discharged to their homes or to other hospitals. Many nonresidents of Douglas County were cared for in all the other hospitals.

CONTROL MEASURES

The public was advised to follow the regular rules of good personal hygiene and cleanliness. Plenty of rest, and avoidance of fatigue, were recommended. Good nutrition was also advised.

Parents were not warned to keep their children from playing with their usual playmates. People were not told to avoid supervised swimming pools. The writer and his wife and two children, ages 4 and 6, went swimming anywhere from one to three times a week, in four different pools. Parents were advised to send their children to school on the usual opening date. Opening of school produced no significant rise in new cases. In fact, many of the cases reported subsequent to the opening of school were old cases which were reported to the school nurse by the children. Actually, the drop off of new cases was steady. School opened on September 2, 1952. The number of new cases reported for the six weeks before the opening of school, and for the six weeks following, are as follows:

Week Ending	1952
July 26, 1952	26
August 2, 1952	36
August 9, 1952	31
August 16, 1952	21
August 23, 1952	29
August 30, 1952	31
Opening of School	September 2, 1952
September 6, 1952	45
September 13, 1952	35
September 20, 1952	44
September 27, 1952	35
October 4, 1952	16
First Frost	October 5, 1952
October 11, 1952	9

The first frost of the season occurred October 5, 1952.

Gamma globulin was not used extensively. It was given by private physicians only when parents were insistent that it be used.

SUMMARY

1. 498 cases of poliomyelitis were reported among residents of Omaha and Douglas County. This was an attack rate of 171 cases per 100,000 population.

2. Geographic distribution was fairly even throughout the City.

3. Most cases (186) were reported with onsets in August. This was followed by 140 in July, and 138 in September.

4. Males had a higher attack rate (190 per 100,000) than females (152 per 100,000).

5. Most cases were among children in the 5-9 year-age-group.

6. 225 of the reported cases were paralytics; 267, non-paralytic; and 6, unspecified. Sixty-one were in a chest lung or an iron lung at some time during the season.

7. Nine cases proved fatal, making a fatality rate of 1.8 percent.

8. Twenty-four families had two or more cases of poliomyelitis. Six families had two or more cases of paralytic poliomyelitis.

9. The attack rate for whites was almost twice that for Negroes, being 176 and 99 respectively.

10. Twelve cases involved women during pregnancy.

11. 361 cases were hospitalized; 137 were cared for at home.

12. Opening of school had no effect on the incidence of the disease.

Preventive Care of Infants and Children

I. Proper Feeding Technic and Its Relationship to "Guided Growth"

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This paper on the technic of infant feeding presents the problem from the physiologic viewpoint. Profuse illustration is used to substantiate their theses that feeding technic should be adapted to the physiologic processes in a given baby, and that such proper adaptation will lead to comfort for baby and parents and will avoid many of the problems of infancy, such as vomiting, colic, disturbed sleep-pattern, and emotional trauma.

EDITOR

INTRODUCTION

Proper feeding technic is imperative to the successful application of any infant feeding routine. This requires, among other essentials, that the infant's stomach be filled to capacity at each feeding and that the passage of air into the intestinal tract be minimal.

The importance of feeding technic has long been recognized. Jordon(1) states that the factor of the upright position is of paramount importance. Smith and Le Wald(2) made some studies on the effect of position in relation to air bubbles, in 1915. One of the purposes of this paper is to determine whether or not the theoretical postulates made by Tompkins(3) in 1945 are true. This present paper is designed, by feeding normal babies under various conditions, to demonstrate proper feeding technic, improper variations from this technic, and some problems which may evolve from these variations. These studies, through the medium of x-ray, show how proper technic assures relative freedom from colic and makes possible regular schedules based on the infant's intrinsic physiological mechanisms. A series of papers to follow will further explain these mechanisms, and their applications.

Proper feeding technic allows the infant to indicate hunger and then to be fed before a prolonged crying episode, with a proper nipple, in the upright position, and to the complete satisfaction of the sucking reflex. All of these factors are important in filling the stomach to capacity so that the infant will be satisfied and sleep his regular interval.

METHOD OF INVESTIGATION

Investigators: The same team of personnel performed all of the studies. This team was composed of members from the Departments of Pediatrics and Radiology, University of Nebraska Hospital.

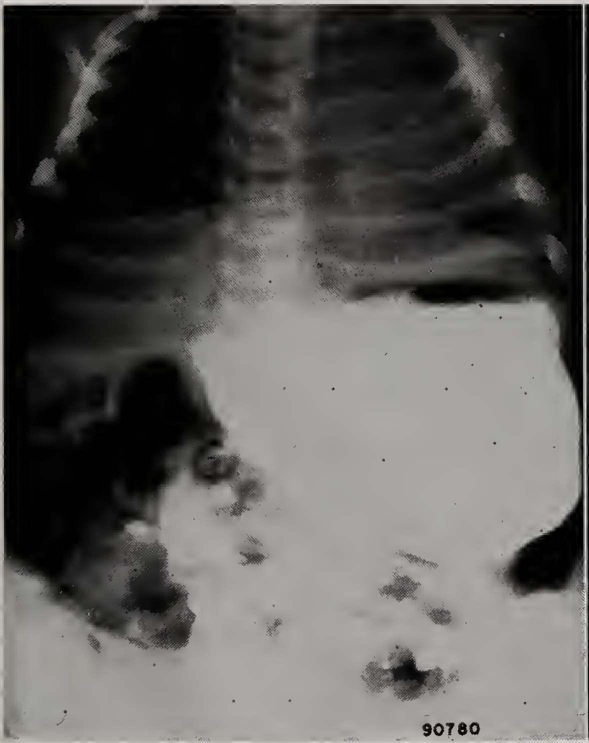

Figure 1—Study 1-A. Six week infant. Fed with proper technic. Film taken in upright position shows almost complete filling of the stomach.

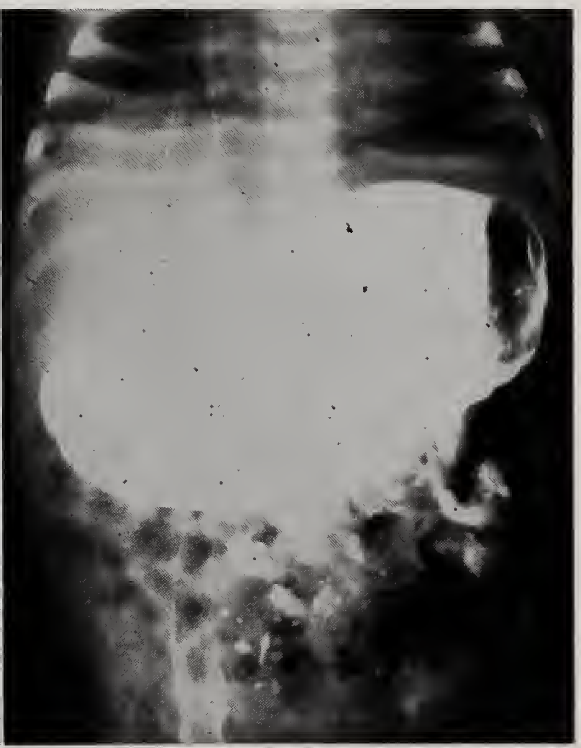

Figure 2—Study 1-B. Same patient in left lateral decubitus position.

Patients: Selected, full term, mature, well infants ranging in age from three weeks to three months. The infants were patients of the University of Nebraska Hospital.

Food: Routine standard formula of one-third evaporated milk, two-thirds boiled water, five per cent Dextri-maltose, plus a small amount of dilute barium mixture added to the formula (one ounce barium mixture to seven ounces formula) for x-ray visualization.

PROBLEMS INVESTIGATED

1. Proper Feeding Technic

Feeding the infant in the upright position, after a short crying interval, and with a proper nipple, to demonstrate complete satisfaction of the infant by filling its stomach essentially to capacity.

2. Horizontal Position

a. Feeding the infant in the horizontal to demonstrate incomplete filling of the stomach, and

b. the passage of air into the intestinal tract.

3. Faulty Nipples

Feeding in the upright position with a "slow" nipple, to demonstrate an infant who becomes fatigued and stops nursing short of a full stomach.

4. Prolonged Crying

Subjecting the infant to a prolonged period of crying before feeding in the upright position in order to demonstrate how the stomach partially fills with air, and, how the infant, because of fatigue, stops nursing short of a full stomach.

5. Inadequate Intake

Allowing the infant to nurse until exhausted, from a mother whose breasts contain an inadequate amount of milk.

1. PROPER FEEDING TECHNIC

Study 1: Six week old white male infant. In the procedure for feeding this infant, all factors mentioned above were observed. A film taken before feeding showed a small amount of air present in the stomach and intestinal tract. The infant took seven and one-half ounces of the barium-formula mixture within twenty minutes. The infant became satisfied, went to sleep, and slept four hours. Films, taken after feeding, showed a small air bubble 1.5x3 cm. in the lateral decubitus position, and, 0.5x4 cm. in the upright position.

Results: This case study shows all factors influencing proper feeding technic. Feeding the infant in the upright position is essential if complete filling of the stomach is to be accomplished. Prevention of colic, minimizing of vomiting or spitting-up, and, regular scheduling based on the infant's own intrinsic mechanisms are thereby realized.

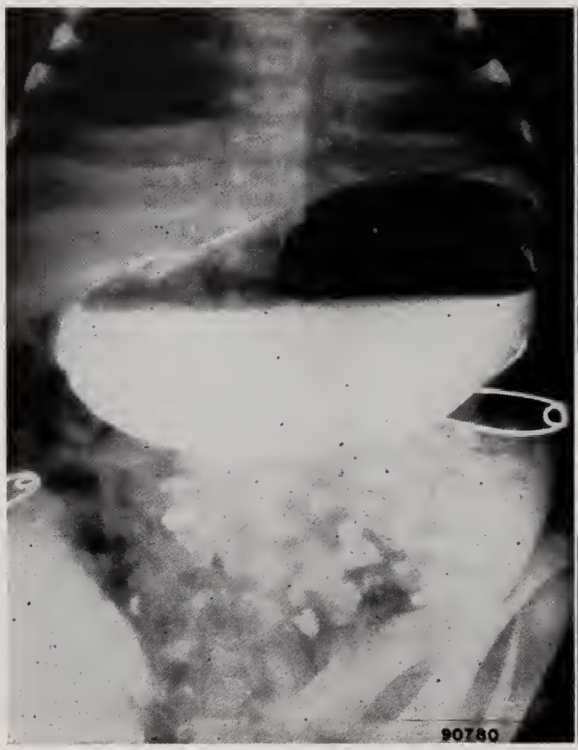

Figure 3—Study 2-A. Six week infant fed in horizontal position. Film taken in upright position shows large air bubble.

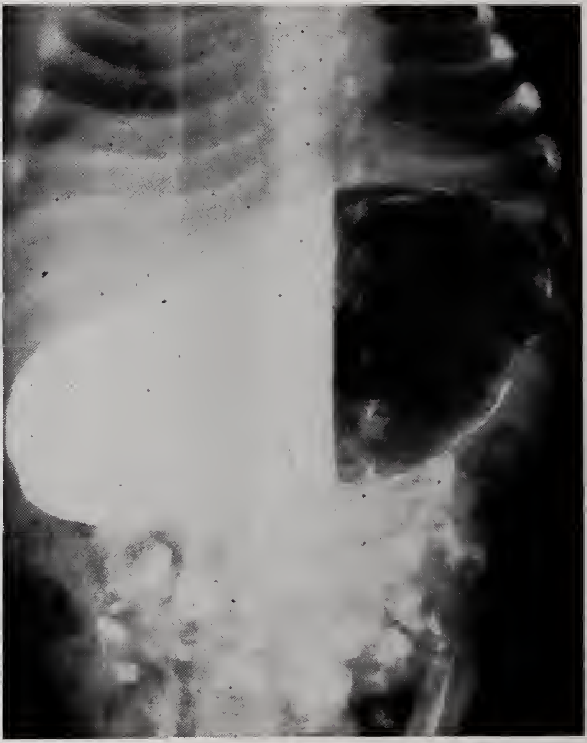

Figure 4—Study 2-B. Same patient in left lateral decubitus position.

2. HORIZONTAL POSITION

A. Complete filling of the stomach with food is not accomplished if feedings are given in the horizontal position. This situation usually arises when the bottle is propped, or, when the infant is fed in the horizontal position while nursing. Air is trapped in the stomach, and the air displaces a corresponding volume of formula. The infant becomes only temporarily satisfied, for variable time intervals, because of the variable combination of formula and of air in the stomach.

Study 2: The same six week old white male. History of vomiting within a few minutes to an hour after nursing, projectile in nature at times. Fed in the horizontal position with the bottle propped.

The infant was fed in the horizontal position until satisfied. The total amount of barium-formula mixture taken was five and one-half ounces as compared to seven and one-half ounces taken during the previous study. The patient refused further feeding. A film taken in lateral decubitus position revealed an air bubble 5x7 cm. A similar air bubble was present when the infant was put upright. The infant remained satisfied only two and one-half hours before indicating hunger, by crying.

The excess air plus the formula in this infant's stomach distended it to capacity. With a change in position or in the process of eructation, this air escapes rapidly; and there is rapid diminution in the volume of the stomach. The momentum from this process, plus the release of possible tension in the abdominal wall, and change in the intra-abdominal pressure, may result in the ejection of food along with the air.

Study 3: A two and one-half month old white female infant. No abnormal history. The patient was fed in the horizontal position and kept in this position for one hour. A film was taken prior to feeding, and at half-hour intervals during the ensuing time interval. These films show the passage of air into the small intestine.

Results: These case studies show that feeding the infant in the horizontal position results in an inadequate filling of the stomach with a resulting variable feeding interval, and may predispose the susceptible infant to vomiting, spitting-up, or to colic.

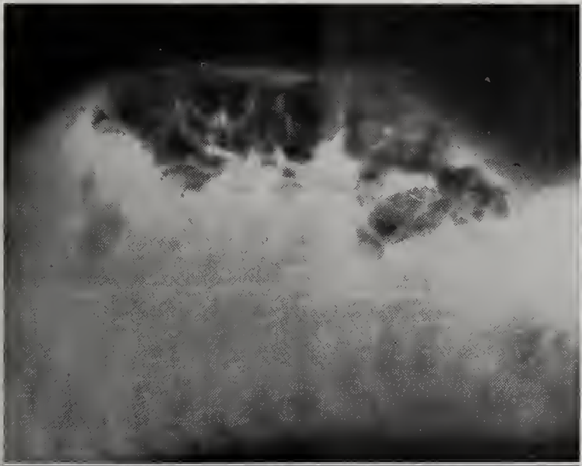

Figure 5—Study 3-A. Two and one-half month infant. Preliminary film in horizontal position demonstrating normal gas distribution.

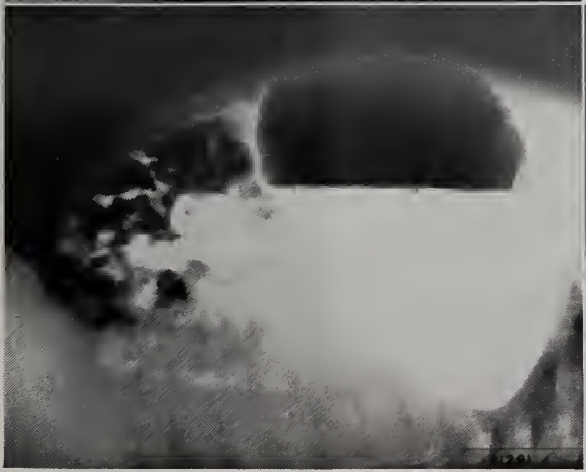

Figure 6—Study 3-B. Same infant after feeding in horizontal position. A large air bubble is present in stomach.

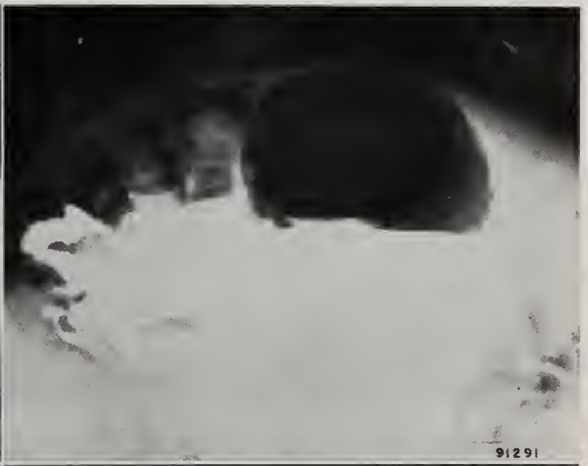

Figure 7—Study 3-C. Same infant 30 minutes later. An increase in air in the small bowel is present.

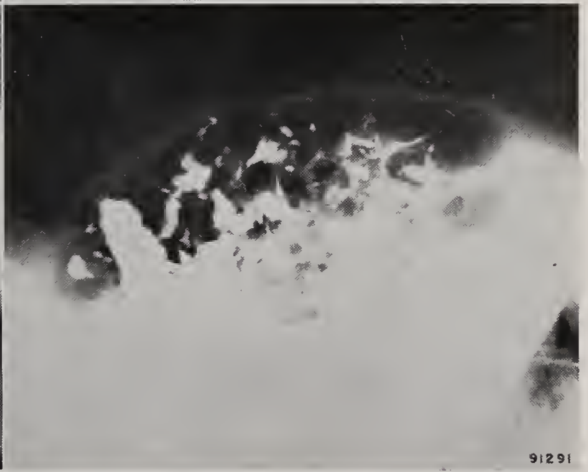

Figure 8—Study 3-D. Same infant 60 minutes later. A further increase in air in the small bowel is present, and less air is in the stomach.

3. FAULTY NIPPLES

A "slow" nipple does not allow the milk to flow freely from the bottle during nursing. The baby must put forth extra exertion which tends to cause fatigue.

Study 4: Three week old white male. Essentially normal history. All factors in feeding procedure consistent with good feeding technic, except for a relatively "slow" nipple. The infant nursed for 35 to 40 minutes before becoming satisfied and falling to sleep, having taken only one and one-half ounces. This time duration is in contrast to the usual 15 to 20 minutes. The films show a poorly filled stomach but with very little air present.

The infant was satisfied for only about thirty minutes, so was fed again with all factors being the same, except that a nipple which delivered a steady, rapid drip was used. The infant, at this time, took three ounces and was satisfied for a period of four hours. At all other feedings, the infant regularly took four and one-half to five ounces of formula and was satisfied for periods of about four hours. Films taken at one of these feedings showed the infant's stomach filled nearly to capacity.

The proper nipple delivers a steady drip of cold milk when the bottle is inverted. "Fast" nipples deliver adequate amounts of formula but the speed of flow may cause the infant to choke, to undergo unpleasant experiences

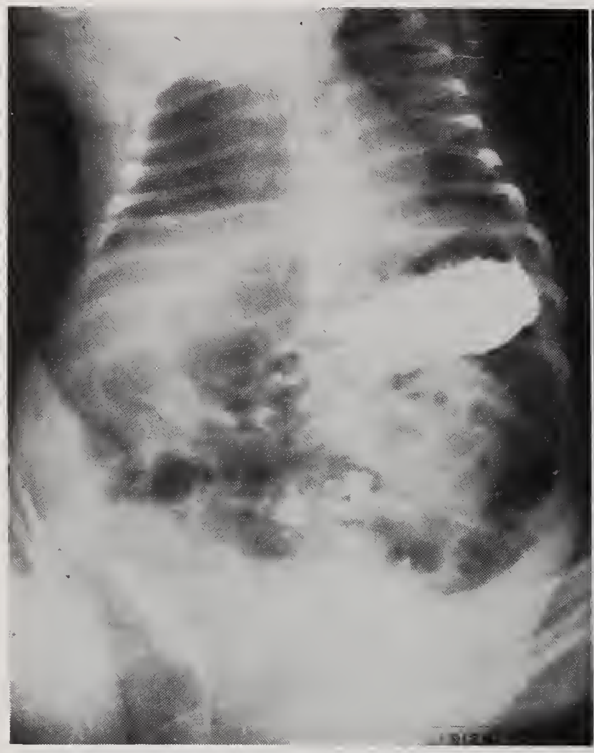

Figure 9—Study 4-A. Three week infant fed with a "slow" nipple in proper position. Stomach partly filled but very little air present.

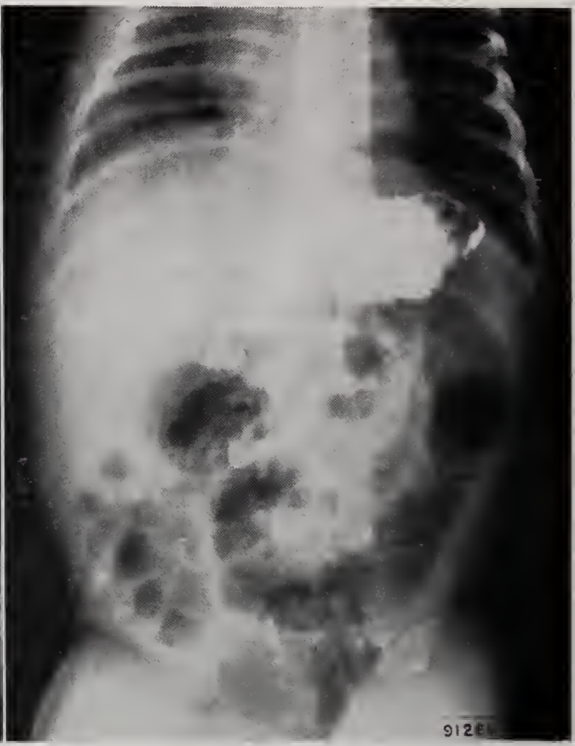

Figure 10—Study 4-B. Same infant in left lateral decubitus position. Very little air present and stomach poorly filled.

regarding feeding, and to become a thumbsucker in order to obtain satisfaction of the sucking reflex.

Results: The use of a "slow" nipple causes the infant to become fatigued. This infant will stop nursing short of a full stomach because of this fatigue rather than because of satiety.

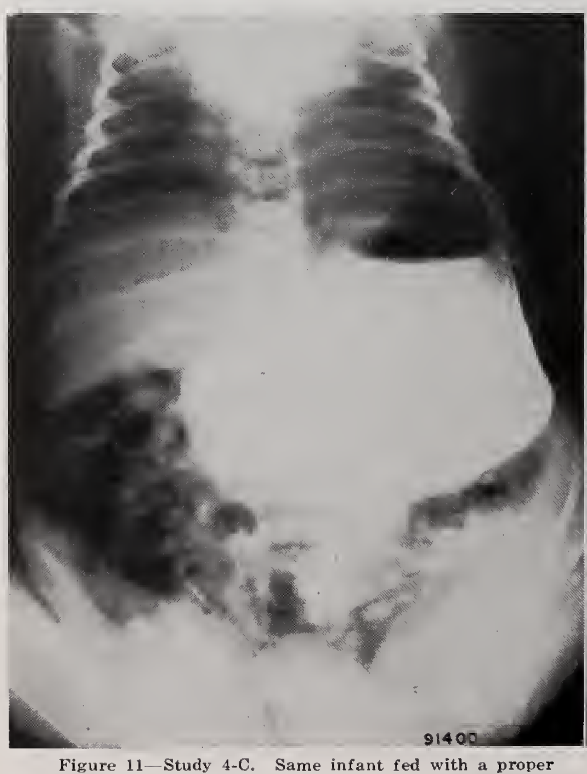

Figure 11—Study 4-C. Same infant fed with a proper nipple. Stomach filled to capacity.

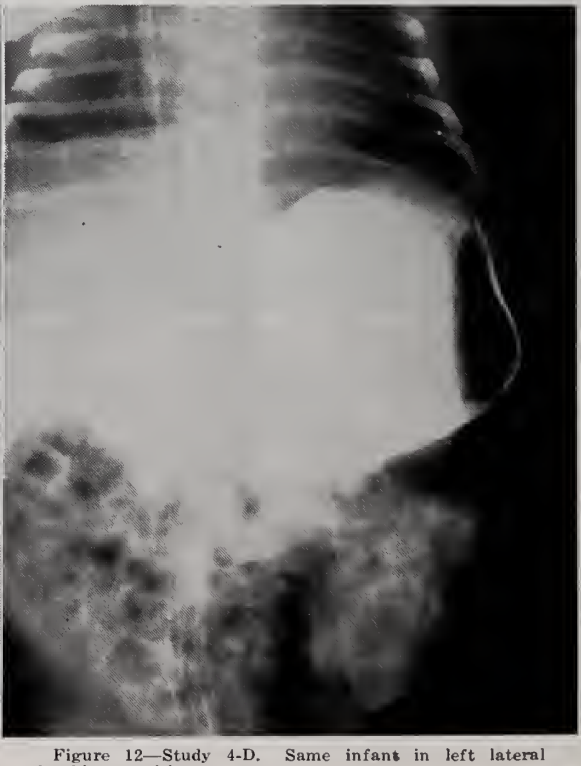

Figure 12—Study 4-D. Same infant in left lateral decubitus position.

4. PROLONGED CRYING

Prolonged crying by the infant prior to feeding time may partially fill the stomach and small intestine with air.

Study 5: Five week old white male infant. The infant had been fed in the horizontal position, taking only one and one-half to two ounces at a feeding, going to sleep on this partial feeding, and sleeping for only about two hours. He would wake long before the expected next feeding time and was allowed to cry for a long period before feeding.

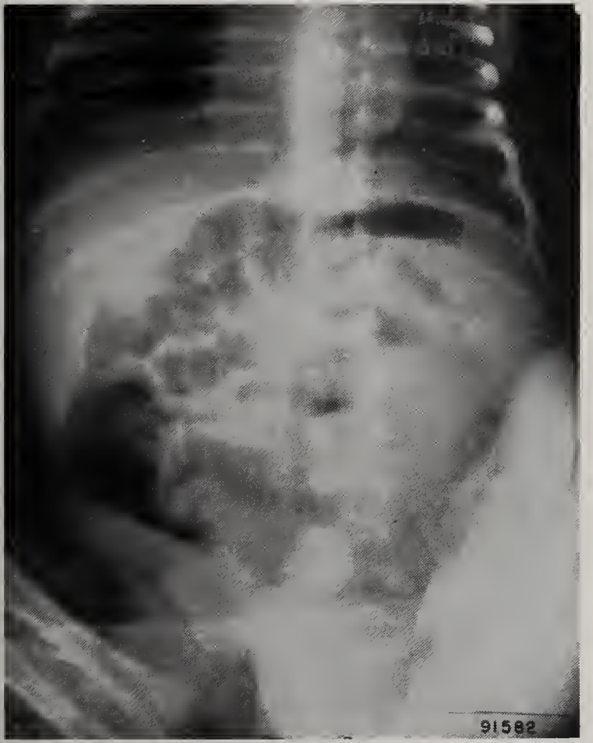

Figure 13—Study 5-A. Five week infant preliminary A-P view showing usual amount of air in the intestinal tract.

A film taken before the infant became restless or irritable showed a very small amount of air in the stomach and intestinal tract.

The patient was permitted to cry and to chew on his fist for a period of one and one-half hours before feeding. Films, taken at this time, show a large amount of air throughout the intestinal tract.

This patient was then fed with proper technic until satisfied and further feeding was refused. The infant took two and one-third ounces. Films taken at this time show a large amount of air and a small amount of formula in the stomach.

The infant remained satisfied for a period of about two hours; but after several feedings were given by the correct technique, the air was no longer present. There was no undue fatigue in relation to the feeding, so capacity filling was reestablished.

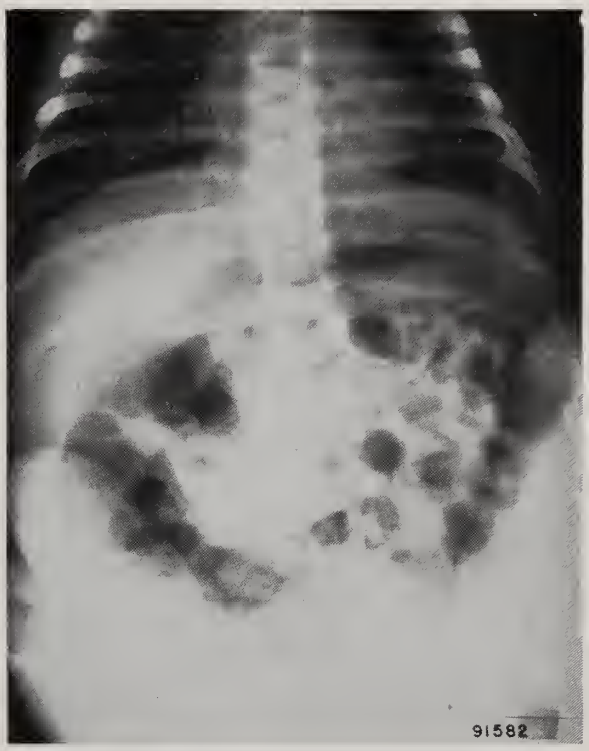

Figure 14—Study 5-B. Same infant after a period of crying. The film shows a large increase in air throughout the bowel.

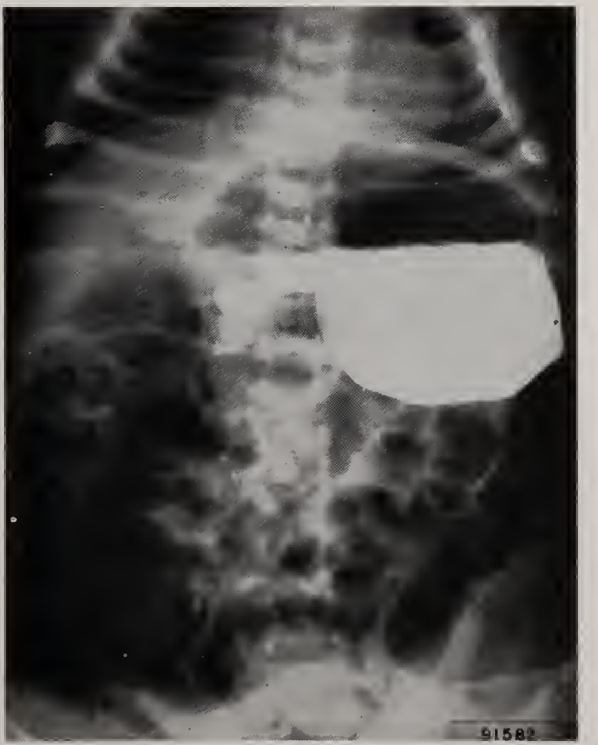

Figure 15—Study 5-C. Same infant fed in proper technic to satiety. Film shows incomplete filling of stomach with air in both stomach and small bowel.

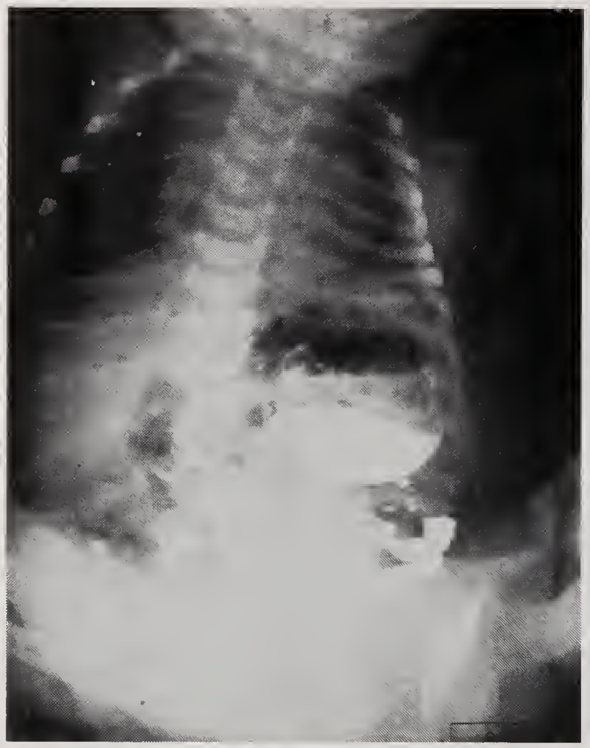

Figure 16—Study 6-A. Six week infant given one ounce of barium water, then breast fed to satiety in upright position. Film shows incomplete filling of stomach. Infant satisfied and slept 40 minutes.

Results: Prolonged crying by the infant, before feeding, causes the infant to swallow large amounts of air and to become fatigued through the vigorous effort. This infant will stop nursing before filled with food, because of the large amount of air present plus the factor of fatigue, rather than because of satiety.

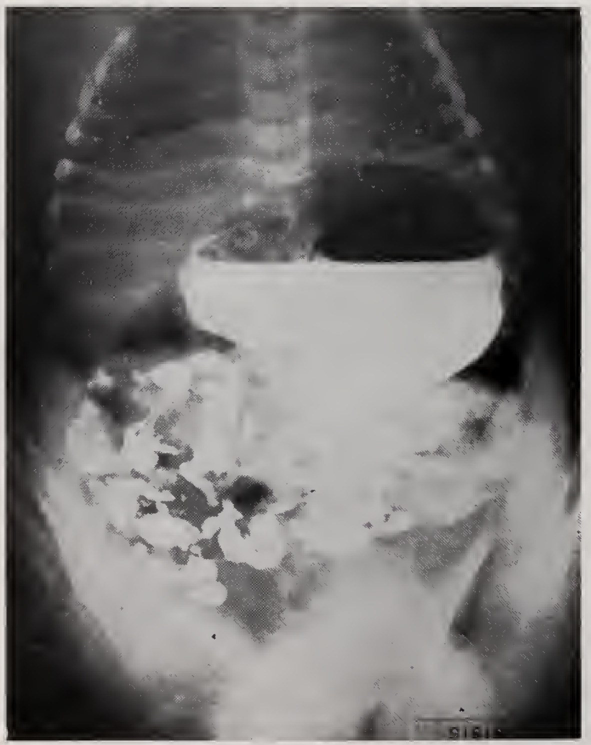

Figure 17—Study 6-B. Same infant refed with formula until satisfied, in upright position. Infant satisfied two and one-half hours. Large air bubble present.

5. INSUFFICIENT SUPPLY OF MILK

Study 6: Six week old white male infant. The infant was breast fed from birth and he had established a consistent four-hour interval. This interval was maintained for about four weeks, and then an irregular pattern developed. The baby was breast fed in the upright position until satisfied after being given one ounce of dilute barium to permit visualization of the stomach. This required over 30 minutes rather than the usual 15 to 20 minutes. Films, taken in the upright position, showed a large air bubble in the stomach due to insufficient quantity.

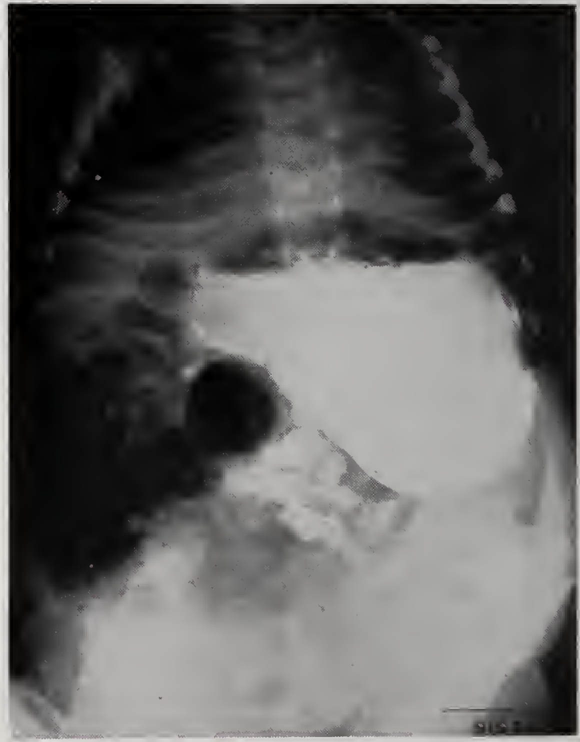

Figure 18—Study 6-C. Same infant two weeks later after sufficient supply of milk present. Film shows stomach now filled to near capacity with very little air present.

The infant was satisfied for about forty minutes; then, upon awakening, he was refed by the same technic, using formula. Some increase was shown in the filling of the stomach, but a large air bubble was present.

After a period of two weeks, by the use of sufficient formula and proper feeding technic, a regular interval of approximately four hours was established. A picture was taken showing the stomach filled to near capacity.

Result: Insufficient amount of milk, either breast or formula predisposes to an irregular feeding routine because of incomplete filling of the stomach.

DISCUSSION

We have seen that when the stomach has been filled to capacity with a sufficiently concentrated formula, the inherent, basic, physiological functions which each infant possesses can influence the feeding and sleeping patterns of the infant to fall into their normal, regular patterns. The result is a happy infant whose basic needs are being met both physiologically and psychologically.

There are certain inherent physiological and psychological functions which must be constantly inter-related if proper feeding is to result. Through these basic functions, certain changes in the feeding and sleeping patterns progress in an orderly, predictable manner. The indications for these changes become apparent through close observation and interpretation of a set of cues which the infant furnishes. A further explanation of these basic functions and their clinical applications will be forthcoming immediately, in a series of papers.

SUMMARY

1. Proper feeding technic is an important adjunct to all regimes of feeding infants.

2. Proper feeding technic consists of feeding the infant soon after he indicates his hunger; using a nipple which delivers a steady, rapid drip; feeding the infant in the upright position; and, allowing the infant to fill his stomach to complete capacity at each feeding.

3. Improper feeding technic has been used if the infant is fed in the horizontal position; is either subjected to prolonged crying intervals before feeding, or fed before hunger is indicated; or, is fed with a faulty nipple, especially a "slow" nipple, and is not allowed to take as much formula or breast milk as desired.

4. Improper feeding technic may predispose the infant to several problems:

a. Incomplete filling of the stomach with resultant irregular schedules.

b. Vomiting or spitting-up.

c. Colic in the susceptible infant.

d. Disturbed sleeping patterns.

e. Emotional trauma.

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Mass surveys of the chest are not intended to establish a final diagnosis but to focus attention on persons who show abnormal conditions in order that further study can reveal what the abnormality is and what should be done about it. (O. Merton Derryberry, M.D., J.A.M.A., January 10, 1953).

"The orifice of the anus, as you know, is closed by the sphincter muscle. The ordinary condition of this muscle is that of being contracted, and thus it prevents the involuntary discharge of feces from the rectum. In the expulsion of the alvine evacuations, the effort of the abdominal muscles and diaphragm is always attended with a relaxation of the sphincter muscle, in consequence of which the contents of the bowel are allowed readily to escape. If this consent and sympathy between these different muscles did not exist—the whole of them being in a state of contraction at the same time—the feces would be expelled with very great difficulty and distress to the patient, or not at all . . ." Brodie: Preternatural Contraction of the Sphincter Ani, London Med. Gazette, 16:26, 1835.

William Withering: "An Account of the Foxglove, and Some of Its Medical Uses; With Practical Remarks on Dropsy, and Other Diseases." (Medical Classic, 2:305, Dec., 1937).

"The use of the Foxglove is getting abroad, and it is better the world should derive some instruction, however imperfect, from my experience, than that the lives of men should be hazarded by its unguarded exhibition, or that a medicine of so much efficacy should be condemned as dangerous and unmanageable."

(Page 306): "I must caution the reader . . . that no general deductions . . . can be drawn from the cases I now present to him. These cases must be considered as the most hopeless and deplorable that exist; for physicians are seldom consulted in chronic cases, till the usual remedies have failed; and, indeed for some years, while I was less expert in the management of the Digitalis, I seldom prescribed it, but when the failure of every other method compelled me to do it; so that upon the whole, the instances I am going to adduce, may truly be considered as cases lost to the common run of practice, and only snatched from destruction by the Digitalis; . . ." (Published originally in 1785).

The Premature Unit of The University of Nebraska Hospital; Its Functions and Operation

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Chairman, Department of Pediatrics, University of Nebraska College of Medicine,
Omaha, Nebraska

It is general knowledge that the mortality rate of the premature and immature infant is extremely high. The statistics obviously are influenced by the frequently unavoidable deaths the first few hours after birth, especially among the very small infants and the infants of toxemic mothers. Improvement in this sphere may be expected only with better knowledge and improved methods in the care of the pregnant woman. The prevention of prematurity still remains a serious problem for the obstetrician. However, many infants born prematurely or immaturely die from causes that may be considered preventable. This is particularly true of the small, yet comparatively sturdy, infants and the infants of larger size whose physiologic functions are adequate but who require specialized pediatric and nursing care. For example, the asphyxiated infant who is resuscitated following delivery and who is subject to repeated attacks of cyanosis, needs specialized care that generally is not available in the small hospital and may not be available even in the larger hospital without specially trained personnel in the nursery.

While the death of any infant constitutes a tragedy, survival, in some instances, may bring even greater sorrow to the infant and/or to the parents and the community. I refer particularly to the problem of anoxia and its frequent sequelae. Physical and mental disability are almost the rule. It is with the objective of contributing to the reduction of the mortality and morbidity of the immature and premature infant that the unit in the University Hospital was constructed. Similar units have been in operation for some time in other states and the reports emminating from those units warrant the efforts and costs of maintaining such a unit.

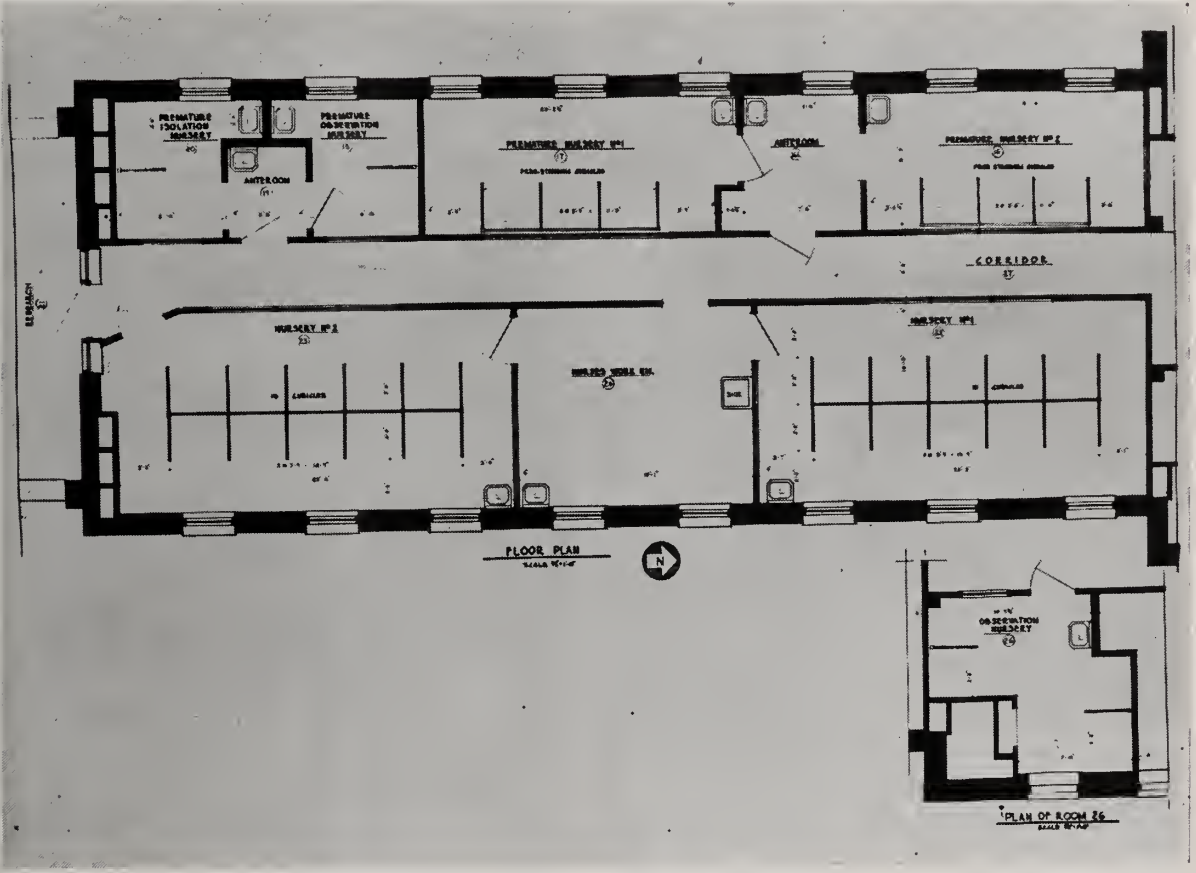
In Nebraska, our mortality record of prematures approximates the national average; although no statistical study is now available, it is reasonable to assume that the death rates in the individual communities vary with the facilities available for the care of these infants. No figures can be obtained on morbidity rates. Handicaps that follow in the wake of anoxia are not reported. Even at the University Hospital, it has been impossible to get a satisfactory follow-up of these infants largely because of the nature of the clientele. An effort is being made now to keep special records of the premature infants and the progress they make in their physical and mental development. This is a long-range study and it is hoped that, when completed, the report will contribute to our knowledge and a better understanding of this group.

The unit was opened on October 1, 1952, and can accommodate fourteen infants. Thus far, the patients have come largely from the premature infants born at the University Hospital.

It is well known that a premature infant, as so frequently happens, requires oxygen for many days or even weeks. This is an expense which the family with a fair income finds burdensome; and people with modest incomes at times find catastrophic from the budgetary point of view. The Board of Regents recently authorized the admission of premature infants of such families as their physicians deem justifiable. The physician should contact the superintendent or the assistant superintendent of the University Hospital to the effect that admission of a premature infant is requested. Self-supporting families are expected to reimburse the hospital for part of the cost of care, the amount varying with their economic status. The infant may be referred to any pediatrician on the University faculty for care, or, if no choice is expressed, the infant will be cared for by the pediatrician then on duty on that service.

It should be understood that while the primary function of the unit is to supply specialized care for the premature and immature infants in this state, an integral part of this function is the training of medical and nursing personnel who ultimately will be the physicians and nurses practicing in Nebraska. The aim is to provide the students with clinical facilities that will help in the training of good doctors and good nurses. Until the unit was opened, it was impossible to do satisfactory bedside teaching in this field. The new nursery was planned for practical bedside instruction of students and nurses in a manner similar to instruction generally featured on other wards. A glance at the cut will show the arrangement of the premature unit as separated from the regular nursery, which at the present time is fully utilized in our clinical clerk program. With an increase in our census of prematures, students will be enabled to study more carefully the nature and care of the premature infant. Staff conferences are now held with small student groups in an effort to teach these students the importance of evaluating the physiology and the methods of handling these small infants.

Aside from the pediatric resident on service, the nursery is under the supervision of a full time instructor in pediatrics and a full time nurse, both of whom have had special training in the care of the premature. It is hoped that physicians throughout the State of Nebraska will utilize the unit judiciously, and thus contribute not only to the reduction of mortality and morbidity of the immature infants but also help turn out physicians and nurses better trained in this field than was possible heretofore.



Premature Unit of the University of Nebraska Hospital

CONTRIBUTIONS OF POSTGRADUATE MEDICINE

Dr. Pullen suggests that today's graduate often reveals: a lack of regard for suffering and human life; deficient training in certain fields immediately applicable to medical practice, such as minor surgery and diseases of the skin and eye; insufficient basic grounding in common ills, care of the chronically ill, therapeutics, bedside diagnosis, use of modern community health facilities; and an inadequate comprehension of social, economic, governmental and other factors influencing the nature of medical practice. (J. of Med. Ed. Mag., 1953).

AMA SURVEY ON HOSPITAL SERVICE IN UNITED STATES

For the first time in history, hospital births topped the three million mark. The Council on Medical Education and Hospitals' 32nd presentation of hospital statistics reveals that in 1952 there were 3,170,495 hospital births or one live baby born every 9.9 seconds.

Average length of stay of individual patients in governmental general hospitals is more than twice as long as in nongovernmental general hospitals—16.4 days as compared with 7.5 days.

Interpretation of Functional Versus Organic Murmurs by Cardiodynamic Methods*

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Doctor Dunn first analyses and emphasizes the imperfections of the stethoscope that alter the audibility and change the character of sounds produced within the chest. He explains why this is most important at low levels of frequency where sound does not end abruptly but becomes altered in character. He then points out the superiority of the photographic record of vibrations derived via the microphone applied directly to the chest wall. He points his discussion to his study of vibrations produced by functional, as contrasted with organic, murmurs.

EDITOR

From the standpoint of accuracy probably the best way to hear a sound originating in the chest is by pressing the ear tightly against the chest wall. The soft skin and flexibility of the ear make an airtight contact, and the volume of air included is small enough so that resonance and echoes are at such a high pitch that they do not interfere. The one ear, rigid stethoscope used at the end of the nineteenth century transmitted sounds well since the air volume was still small and accurately contained although it was more difficult to keep this system airtight. The modern or flexible binaural stethoscope introduced a much greater air volume and, in addition, variable lengths of rubber tubing together with chest pieces and ear pieces of various irregular shapes. The net result was an instrument which had about all the possible acoustic errors that could be introduced. The flexible stethoscope was not made as a superior instrument for hearing sounds but as a convenience to the clinician and as a means of avoiding the unesthetic direct contact. Fletcher and Dodge of Bell Telephone Laboratories, as far back as 1924, showed the distortions produced when the open bell stethoscope is used and we have recently verified these data. Two stethoscopes are rarely alike. The tubing results in resonance or reenforcement of certain frequencies while a nearby frequency may be almost completely attenuated. For example a frequency of 200 cycles per second may be transmitted several hundred times better than one of 100 cycles.

Aside from the fact that the flexible stethoscope was poorly designed for transmitting audio-sounds, there is another important difficulty in listening to heart sounds. A large portion of the energy transmitted to the precordium is in the form of low frequency vibrations, i.e. vibrations which are at the lower limits of hearing. The concept of a lower limit of hearing is much more complex than generally appreciated. At the high frequency limit the sensation of hearing simply disappears. At the lower frequency end of the spectrum, perception persists but becomes replaced by various distortions. This confusion has much to do with the somewhat academic controversies as to whether the first heart sound is valvular or muscular. Several points should be emphasized briefly: (1) We must not forget that the so-called normal audiogram is a smoothed curve made up of tens of thousands of observations. Individual audiograms when carefully made show that we all deviate widely from the normal. (2) Wever and his associates at Princeton have done much to clarify the low frequency threshold for hearing. They have shown that at low frequencies (e.g. 25 cycles per second) and even at low levels of intensity there is distortion so that with carefully controlled smooth pulses of high purity the subject will report that he hears clicks, shushing sounds, and sounds resembling murmurs. This distortion is not purely psychological since Wever was able to show the same distorted pattern in the action currents picked up from the cochlear nerve of the guinea pig. This work of Wever would appear to be of great significance in explaining a portion of the confusion that exists in the interpretation of split sounds and functional murmurs. Knowing the acoustic errors of the flexible stethoscope, and the distortions present in the hearing mechanism at low frequencies it is easier to understand the clinical disagreements that occur so often in the description and interpretation of heart sounds and murmurs, and maybe helps to account for the frequency with which the stethoscope is linked with the art rather than the science of medicine.

The above has much to do with the problem of differentiating murmurs. To circumvent these problems we have avoided the stethoscope and tubing and the use of the ear as a detecting device, and have approached the problem from the standpoint of vibrational analysis. The microphone is calibrated in dynes, units of force, and the sensitive element of the microphone is in direct contact with the precordium thus avoiding the resonance and harmonic problems of the flexible stethoscope. The net result is that we record the heart vibrations from the precordium photographically and, since the recording system can be adjusted to within 5 per cent error, it is possible to study the location, direction of transmission and attenuation of sounds, or time their appearance in various areas of the precordium.

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*Presented at the Omaha Mid-West Clinical Society, October 30, 1952.

In our present series of about twenty cases of functional systolic murmurs it is apparent that, from a vibrational standpoint, they differ from organic murmurs in the following respects: (1) They have a nearly pure frequency and this is in the range of 90 to about 130 cycles per second; (2) the systolic murmur does not interfere with the first heart vibration and stops definitely before the second heart vibration begins; and (3) there is a characteristic distribution along the left border of the heart extending up into the base of the heart. To date none of the murmurs having these characteristics has been found to be organic.

Organic murmurs, in contrast, have a variety of frequencies. They can invade or replace the first vibration. They can extend into the second heart vibration or may extend through the second vibration. They can be of an inaudibly low frequency such as are found in some instances of patent foramen ovale or defects in the interauricular septum. The shunt character of a murmur is much more easily analyzed by the vibration technique than by stethoscope or phonocardiography, which some are still attempting to use as an adjunct of the stethoscope.

This method, being a quantitative vibration technique, is a direct measure of cardiodynamics as presented at the precordium. Since the records permit quantitative analysis as regards frequency and amplitude, it is possible to study the direction of transmission of precordial vibrations. This permits the separation and identification of several murmurs. Murmurs that are transmitted in directions that do not conform to normal anatomy permit identification of shunt defects. The simple frequency pattern of the systolic functional murmur implies an extracardiac origin. Correlation with the pressure variations within the heart and the hydraulic conditions that develop murmurs will require much study. The poor freqency response of present catheterization techniques makes it difficult to make direct comparisons with precordial data.

Arthur S. Flemming, Acting Defense Mobilizer, today announced that the Office of Defense Mobilization has assumed responsibility for coordinating the distribution, in the National Blood Program, of available supplies of immune serum globulin (gamma globulin) for use in the treatment of poliomyelitis, infectious hepatitis and measles.

Major use of immune serum globulin, a derivative of human blood, up to this time, has been in the prevention or modification of measles and infectious hepatitis. Recent tests have demonstrated the effectiveness of immune serum globulin in preventing the paralysis that often accompanies poliomyelitis. Its additional use has placed greater demand on this already scarce product.

Main supplies of immune serum globulin are being made available by the American National Red Cross, the Department of Defense and the National Foundation for Infantile Paralysis. A plan for its equitable distribution is now being devised.

The National Research Council has set up a panel of medical authorities to work out the plan of distribution for making the most effective use of the available supply. The panel is under the Chairmanship of Dr. Hugh Leavell, Harvard University, Cambridge, Massachusetts. Its members are Dr. William McD. Hammon, University of Pittsburgh, Pennsylvania; Dr. Thomas P. Murdock, Meriden, Connecticut; Dr. John D. Porterfield, State Department of Health, Columbus, Ohio; Dr. Bruce Underwood, State Department of Health, Louisville, Kentucky; Dr. Alexander Langmuir, Communicable Disease Center, Atlanta, Georgia; Dr. J. M. Shanon, National Institutes of Health, Bethesda, Maryland.

Commercial producers have indicated their willingness to make available most of their existing inventories and most of their next six month's production of immune serum globulin to the National Foundation for Infantile Paralysis. The Foundation will purchase this available supply and turn it into the common distribution system.

The American National Red Cross has agreed to increase its blood collections to meet this additional need; to pay for the processing of the immune serum globulin being made available by the Department of Defense; and to pay for the processing of the current supply derived from the National Blood Program.

The plan now being developed contemplates distribution of the central supply of immune serum globulin to State Health Officers, who in turn will be responsible for its final local use.

"This plan is being developed to meet the overall interests and needs of the American people. The success of this effort will depend on the support of the American people in donating their blood," Mr. Flemming said.

Recent Observations of Medical Practice in Sweden*

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Doctor Isacson takes the reader on a very interesting excursion into his home-land, Sweden, where he carefully scrutinizes and describes the practice of medicine under a socialistic regime. He describes the educational system for doctors, the conditions under which they practice medicine, and the hospitals of various types in which they work. The revenue derived from practice is discussed in some detail. He concludes that there has been reasonably good adaptation to these conditions in Sweden, but that such a system would be highly displeasing to us, in America.

EDITOR

It was my pleasure to visit my "Old Country", Sweden, during the month of August this year. Since I had not been back to Sweden after I left there forty years ago, the principal object of my trip was to visit my sisters and other relatives, but also to see again the places where I used to play around as a kid. At the same time, however, I thought it might be interesting to find out as much as time would permit me about the management of medical practices. I felt well rewarded even though my time was short and had to be spent mostly in hospitals.

I have often noticed, both in my reading and in discussions about so called "Socialized Medicine", that what has been going on in Sweden during the last thirty or forty years is rarely mentioned. This is probably mostly because the type of medicine practiced there is a highly modified form of state medicine, differing in many respects from our own set up but also differing a great deal from the present English practices. It appeared to me — on a rather superficial and hasty examination — to be working out quite satisfactorily to both the general public and to the medical profession. In evaluating its effectiveness, however, one must bear in mind that Sweden is a country of only seven and one-half million people, less than there are in New York city, all of essentially one race and one religion, with a government of a social-democratic-monarchy type, depending equally on agriculture, forestry, mining and fishing, and on industries developed around these natural resources.

In the first place, about the education of the medical man in Sweden. The so called "Studentexamen" is required. This is the same as the German "maturitets" examination and corresponds, roughly, to about three years in college here. The subject matters are about the same, except that more attention has been paid to languages. They include four years of latin, six years of French or English and six years of German. This examination is usually finished at the age of nineteen to twenty.

The need for such an extensive language training in a small country is plainly evident and the value of it was well illustrated to me at one of the hospital rounds. A young Docent or Associate Professor was taking a visiting German doctor and me around. The German could not talk Swedish or English, my own Swedish was rather poor, but the young Swedish doctor handled all three languages equally well.

After the studentexamen comes seven years of professional training at one of the four universities,—Upsala, Lund, Stockholm or Gothenburg with a total enrollment of 165 students. The number of students permitted to enter these professional schools is regulated by the Ecclesiastical Department of State. Approximately eighty per cent of the students complete the course to graduation.

The curriculum for the undergraduates is essentially the same as ours; the first two and one-half years are given over to the basic science subjects and a degree of Medicine Kandidate is then given, corresponding to our B. Sc. degree. The remainder of the time is spent in departmental hospital service with ten months of internal medicine, ten months in surgery, four months in obstetrics and gynecology, two months each in the lesser subjects, and, among these, three months of legal medicine.

After graduation there are no further examinations to be taken by those who go directly into a general private practice. Approximately ten per cent of the graduates enter a Communal Hospital service, connected with one of the universities, for a three-year-study and work-period as so called "Underlakare" with special attention paid to one particular branch of medicine, for the purpose of obtaining an M.D. degree. This degree, then, is taken by those who wish to specialize, become teachers, or scientific investigators. It is granted after the presentation of a thesis and the acceptance of it by a highly critical group of medical men appointed by the university faculty. While working as underlakare, or residents, they are paid a sufficient salary to live on—about $4,000 per year. The work may be undertaken at any one of the four universities. The men in this group eventually become "Docenter" e.i. associate professors, and full professors or specialists.

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*Read before Omaha Mid-West Clinical Society, October, 1952.

Those who go into a general practice may, with luck, expect an income of about $5,000.-00 to 5,500.00 per year. Office calls average $3.00 and house calls, $5.00.

Those who go into the service of the state are called "Provinciallakare" or county physicians. They are the hardest working doctors in the country. After serving eight months in a communal hospital they are assigned, by the State, to a definite province or county, at a very low salary; but, they are entitled to collect fees from patients who are capable of paying, in accordance with a fee-schedule set by the State in 1938: sixty cents for an office call and one dollar for a house call. They may also take private patients, however, and these are charged at the usual rates of $3.00 and $5.00. These physicians are also responsible for public health measures in their respective districts and for preventive medicine in the schools. They are retired at the age of sixty-five with a pension of about $2,400 a year.

Permanently employed military doctors in Sweden are few. There are about 30 in the navy and 120 in the army. This service is further implemented by about 150 to 200 private physicians who are each serving two months a year in the army or navy at a salary of $700.00 per month. These are, therefore, regarded as highly desirable appointments.

HOSPITALS

The hospitals in Sweden, as with us here, are crowded. They are apparently occupying a more and more important place in the nations health management. This is partly due to more efficiency in hospital management, new methods in diagnosis, and availability of trained personnel; and, partly due to difficulties in obtaining proper care in private homes. There is also the fact that building material has been at a premium and that there has been a scarcity of trained personnel aside from those at the hospitals.

The Sahlgrenska Hospital in Gothenburg is the largest in the country, with beds for about 1,800 patients, long waiting lists and a large out-patient clinic. This is a community institution supported by the city of Gothenburg. It is a closed institution staffed by about 200 doctors and 1,500 nurses, nurse-aids, and other professional help. It is entirely departmentalized with one so called "Ofverlakare"—a professor—in charge of approximately 150 patients and assisted by a number of so called "Underlakare", or residents, each of whom is responsible for the history and actual management of twenty-five to fifty patients, depending on local conditions.

Any doctor in Gothenburg, who is in good standing in the local medical association, may send his patients to this hospital, but none except the staff doctors may then treat them. The patient is examined at the clinic before admission and, at this time, his tax statement is also scrutinized. When he leaves the hospital a resume of his hospial management is sent to the referring physician. At the present time there is still argument as to what to do with those patients who present themselves at the clinic without being referred by a physician. A Royal committee is, at the present time, trying to find the solution to this problem. The consensus of opinion seems to be that only those patients who are in need of examinations requiring special knowledge or equipment that only the hospital can offer shall be accepted as out-patients.

At the hospital the patient pays three crowns per day, the equivalent of sixty cents, and this includes all service: room and board, doctors, surgery, medicines, x-ray, laboratory, and other incidentals. The charge may even be less if the patient's tax statement warrants. Even this fee is usually taken care of by the majority of patients by belonging to a so called "sjuk-kassa", corresponding to our Blue Cross and Blue Shield. This is a private but state supported institution of entirely voluntary membership. The members pay fees or premiums from twenty cents to $1.20 per month, and receive benefits graded accordingly up to sixty cents per day. A physicial examination is required before membership is granted.

Childbirths are handled in the same fashion. In addition, the state pays a bonus of $14.00 every three months for each child up to the age of fifteen. This is called a "Moderskapspenning" or Maternity Support and it has happened that both mother and child have been the recipients of this bounty.

There is legislation now pending to the effect that all people must belong to such a sick-insurance organization and that this organization shall be under state control. It is not expected that such a strong socialistic action shall go into effect for another ten years.

It was my pleasure to make the rounds in one of the internal medicine departments with Prof. Martin Odin, well known in Europe as an internist, scientist, and author. I admired his attitude towards his patients very much and took special notice of the intense respect, without feeling of servility, that was accorded him by patients, residents, and nurses alike.

The round started in the x-ray department with demonstrations and discussions of films taken during the previous day. Then, to the laboratory where special tests were demonstrated and evaluated. Then came the ward-walk. At the foot-end of each patient's bed was a holder with a single sheet showing the patient's name, date of admission, T., P., and R., and current medication. Professor Odin would glance at this sheet and then at the patient's complete record, carried in a large loose-leaf book, by the floor supervising nurse. There was cheerful greeting to the patient; "Hur star det till i dag" eller "Hur mar Ni" from Dr. Odin; a low toned question about the diagonsis or mangement from one of the three or four accompanying residents; an occasional auscultation or percussion of the chest, or palpation of the abdomen; averaging not more than a few minutes for each patient. We saw fifty or sixty patients that morning.

In the evening another round is carried on by the same residents, and, at this time or in the meantime, histories are taken, physicial examinations made, and the general treatment outlined.

The nursing care seemed excellent. The rooms may be private, two, or four bed. The newer buildings had no wards with more than four beds. All the rooms were connected with a closed alcove containing wash-stand, toilet, sitz-bath, and, in a few instances, showers. The furnishings were usually of light wood and the beds were equipped with large retractable rubber wheels by means of which the entire bed could easily be wheeled to any department, thru the mile long corridors. I was told that the night-force uses bicycles.

In general, the medication used seemed much like ours. The majority of the larger American biologic houses were well represented. Sulfa types of medication seemed to be in disrepute but all of the antibiotics were popular. Protamine Zinc and Regular Insulin — no NPH or Globin — were used. Digitoxin, morphine, papaverine, lanatocide, and strophanthus were much in evidence. Some cortisone was in use, but more of ACTH. Desoxycorticosterone plus Vitamin C as a treatment for arthritis, has been given up and I sensed a certain amount of shame that this treatment, which originated in Sweden, had been given so much of unwarranted publicity.

There was a well organized blood-bank, processing approximately fifteen pints of blood a day. It is managed by the hospital and supported by the Red Cross.

The PAS treatment of tuberculosis in conjunction with dihydrostreptomycin, was originated by Professor Lehman of the Sahlgrenskka Hospital staff. The laws governing the management of tuberculosis are well defined by "Medicinalstyrelsen". All cases are reported and receive treatment in special sanatoria. Isonicontinic Acid Hydrazide is, at the present, experimentally tested.

All luetic cases must be reported. They receive free treatment in special clinics. Salvarsan and bismuth are still used. The end result of penicillin treatment is questioned, but it is being used at the rate of six million units a day for one week, in the latent cases.

The treatment of cancer is centralized in two major clinics located in Stockholm and Gothenberg. These two institutions were built by funds collected as contributions from the entire country, in honor of the old King Gustav's fiftieth birthday. They are constantly filled.

There are approximately 6,000 legalized abortions performed every year. The written opinoin of two doctors is called for, and severe systemic disease, rape, major psychosis or expected difficulties are regarded as sufficient reasons. A psychiatric survey recently performed, has shown that twenty per cent of these women become pregnant again, within one year. Regrets and a sense of shame were expressed by twenty-one per cent of the women questioned. Seventy-nine per cent expressed satisfaction with, and gratitude for, the operation they had undergone. In addition it is estimated that there are approximately 20,000 illegal abortions performed each year.

Private hospitals are few and far between in Sweden. I visited one in Gothenburg, called the Carlanderska Sjukhemmet. This is a sixty-nine bed, fine institution, donated to the city of Gothenburg for those who wish to continue having their own doctors while hospitalized. Like all such private institutions it has its own financial difficulties and must depend much on endowments, even though, for Swedish conditions, heavy charges are made for services. The rooms here were also private, semi-private and four-bed wards, and the respective charges were $8.50; $6.50, and $5.75, with extra charges made for operating room, medicine, x-ray, laboratory, etc. I was much impressed with the care used in decorating the rooms and the visiting nooks in the corridors.

A feature of interest to me was that the attending physician pays a hospital fee of respectively one dollar, sixty, and forty cents per day per patient, for the privilege of having his patients there. This, of course, is added to the patient's bill.

In Stockholm I visited "Sodersjukhuset" the South Hospital. This is Sweden's most modern hospital, erected during the war, and completed in 1947. A tremendous lot of planning and collaboration between physicians, nurses, architects, engineers, and specialists of all kinds, went into the building of this hospital, at a time when most of the rest of the world was engaged in war. It now stands as a model of modern hospital construction for all the rest of the world. Its concept is that of a complete welfare center with complete and intimate co-ordination between hospital work on the one hand, and health, social, and labour welfare on the other, adapted and fit for a democratic people.

It is built on the double block-system rather than as isolated pavillions. The former is preferred in order to better facilitate the co-operation between the various departments. By the double block-system is meant an arrangement whereby the two main blocks of the hospital building e.i. the examination and treatment block on the one side, and the ward block with administration offices on the other side, are joined by four communication blocks, each one serving both in- and out-patients. It has a capacity of 1,200 beds and an out patient department capable of handling 1,000 patients a day. It serves a district of approximately 250,000 people.

Much attention has been paid to the most advantageous placing of the two complete diagnostic x-ray units, the laboratories, the primary and secondary diet kitchens, the solariums, and, to as much separation as possible of patients and visitors.

Beneath the whole of the ward block there has been blasted out of the rock a complete central infirmary, having for a roof seven to eight meters of prime Swedish granite. This air-raid-shelter is large enough to handle 2,000 persons. There are beds for 700 patients, and two complete operating departments, each with two operating tables. It has its own Diesel-driven power plant, and a special well sunk into the rock. There is also a good emergency exit in case all other exits might be closed by bombing.

An "after treatment-hospital" is in the process of construction. It is to contain 300 beds and is to be used for those patients who, after discharge as acute cases, may, for various reasons not be fully capable of taking care of themselves. Such an institution, entirely separated from the rest of the hospital, provides opportunity for follow-up treatment and observation. It is estimated that about forty per cent of the patients can be evacuated and thereby leave more room for new acute cases.

In the main hospital the room was essentially the same as at the Sahlgrnska Hospital in Gothenburg with a maximum of four-bed wards. One nurse takes care of sixteen patients and a supervising nurse is in charge of thirty-two patients. The resident takes care of about thirty patients and the entire clinic-unit constitutes about 135 patients in the surgical and 100 patients in the medical units.

Each group of thirty-two patients has its own lavatory room, examination and treatment rooms, sterilizing rooms, conversation rooms for history taking, kitchenettes, wardrobes, day-room, and sun parlor or solarium.

Of the many various departments time did not permit me to see more than one in detail and that was the department for cardiovascular disease. This department consists of an out-patient clinic, laboratories, and wards comprising 103 beds. The laboratories were divided into sections, with separate rooms for fluoroscopy, teleroentgenography, and heart catheterizations and for electrocardiography with American, Swedish, and English machines. Routinely, three extremity leads and two chest-leads are taken, and additional chest-leads in special cases, the latter resulting in an increase of fourteen per cent in accuracy. There was a room for a Cathode Ray Oscillograph for determination of maximum potentials, a hypoxemia room for hypoxemia tests, phonocardiography and venous pulse tracings. At the present time a nine per cent oxygen in nitrogen is used for ten minutes and electrocardiograms are taken immediately before and after breathing the low oxygen mixture; two rooms for cardio-pulmonary function tests equipped with Nylin's staircase and Krogh bicycles for administrations of standard exercise tests, followed by electrocardiograms and oscillograms.

There were separate sections for study of congenital heart disease and for peripheral vascular diseases; also, large rooms for biological research, and a library well equipped with a lantern-slide library.

Specially equipped rooms were set aside for diagnostic application of medical physics, principally concerned with the use of P32,-radio-active Phosphorus-for labelling erythocytes in estimations of cardiac output and the number of red cells. This work started in 1942, and since then some 300 experiments have been carried out.

As a side-issue the apothekaries or drugstores in Sweden intrigued me very much in that they were entirely devoted to the dispensing of medication and not concerned with department store activities. The larger apothekaries are equipped with their own research and testing laboratories in charge of well qualified chemists. Only a few of the most common types of medication may be obtained without a doctor's prescription. The labels attached to the patients medication differed from ours in that, besides the doctors orders for the taking of the medication, the complete contents is typed out.

Another minor item of interest was that the local paper would carry advertisements, inserted by the local county medical society, announcing when the private physicians would leave on their vacations, or when returning to their practices.

In conclusion I may say that medical practice in Sweden is of a modified socialized type which appears to have been worked out to reasonable satisfaction for both the people at large and the professional workers; that the professional standing in medical practice and in research is very high; and, that emphasis is laid more on the hospitals, not only as institutions for the treatment of the sick, but also as research and social welfare centers. Modified as it is, this Swedish type of "Socialized Medicine" embodies many principles of Welfare-State philosophy which are highly obnoxious to us here in America and which have, so far, been successfully defeated in this country.

Tuberculosis Abstracts

ENERGY COSTS OF VARIOUS PHYSICAL ACTIVITIES IN RELATION TO PULMONARY TUBERCULOSIS

In the management of pulmonary tuberculosis, the question often arises as to how much physical activity a given patient may assume and yet safely avoid stress with possible reactivation of his disease. Precise definition of the limit between tolerance and stress is not possible, for neither are the relevant factors fully understood nor are measurements feasible. However, the intensity of physiological work, that is, the energy expended in the performance of a task, can be obtained. While this method does not reveal the working capacity of the individual, it has the following advantages: (1) the degree of cardiovascular response roughly parallels the intensity of work in terms of energy expenditure; (2) respiratory responses are easily determined with the measurement of work intensity. Thus, a rough index of the magnitude of cardiorespiratory stress imposed upon a patient is afforded by a determination of the work intensity of a given task. The intensity of energy expenditure is measured in terms of oxygen consumption per minute. On this basis energy costs of some common activities were determined to provide the clinician with a knowledge of their general orders of magnitude. This knowledge in conjunction with the clinical data could serve as a guide in judging the wisdom of allowing a patient to engage in activity when apparently indicated on clinical grounds.

As a preliminary study to ascertain whether different individuals would display equivalent results in performing a given task, mainly healthy subjects were tested. Nine normal female and four normal male subjects were used; as the investigation progressed, four male patients on ambulatory status were included in the study. These exhibited no impairment of pulmonary function and presented the usual criteria of apparently arrested disease for four to six months. Such subjects probably afforded values for working energy cost comparable to those for healthy subjects, since they were on an ambulatory status and in a better state of physical fitness than clinically active patients. No comparison was made between healthy subjects and patients, as the latter comprised too small a group.

ENERGY COST OF SELF-CARE AND WORK ACTIVITIES

Activities	Per cent rise above the basic metabolic rate	Source
Sitting	17-25	Harvard Fatigue Laboratory, Orr
Standing relaxed	38	Harvard Fatigue Laboratory
Conversation	38	Harvard Fatigue Laboratory
Dressing and undressing	43-53	Sherman, Brody, et al
Personal toilet	38	Harvard Fatigue Laboratory
Showering	242-377	Author
Eating a meal	38	Harvard Fatigue Laboratory
Writing a letter	75	Harvard Fatigue Laboratory
Writing a letter	20	Author, Kestner, et al
Strolling	75	Harvard Fatigue Laboratory
Walking slowly (2.6 m.p.h.)	160	Sherman
Using wheel chair (1.2 m.p.h.)	138	Author
Walking moderately fast (3.75 m.p.h.)	290	Sherman
Walking downstairs	320	Sherman
Walking upstairs	1330	Sherman
Hand sewing	40	Sherman
Knitting (23 stitches per min., sweater)	50	Sherman
Making link belt (reclining):		
stiff leather (4 links per 3 min.)	39	Author
soft leather (4 links per 3 min.)	27	Author
Leather tooling (reclining)	24	Author
Leather punching and lacing (reclining)	22	Author
Chip carving (reclining)	45	Author
Copper tooling (sitting)	41	Author
Weaving—hand loom (2 operations per min.)	50	Author
Weaving—floor loom (2 operations per min.)	99	Author
Chisel carving (sitting)	122	Author
Tailoring	75-105	Sherman, Farkas, et al
Typing	20-50	Kestner, et al
Typing rapidly	82	Sherman
Bookbinding, light	56-92	Kestner, et al
Bookbinding, partly heavy	105-120	Sherman, Kestner, et al
Wood work on sanding lathe	119	Author

Fifty-three experiments were carried out with the normal group and five with patients. Tasks selected were those applicable to patients either on a modified bed-rest program or on limited ambulation. Since the rate of work influences the energy expenditure, it was controlled whenever possible; otherwise the optimum tempo for the individual was allowed.

This work is concerned only with the intensity of the rates of energy cost of various activities and not with the total daily energy expenditure. It is believed that the factor of intensity is as important as the total sum, since a short burst of relatively high energy cost may be injurious to the tuberculosis patient by exceeding a critical level above which physiological stress may cause pathologic changes. For example, a physician rightly hesitates to allow showering for patients still in a dubious clinical status; the four or five minutes of activity is insignificant in the total daily expenditure, yet the high intensity of physiological stress engendered even briefly casts doubt on the wisdom of allowing it. A knowledge of the intensity levels of energy costs may contribute to the final judgment regarding the prescription of certain activities for a patient. A compilation of energy costs is presented, therefore, in which appear observations from these experiments and those reported in the activities of daily living and for work therapy.

The levels of energy cost assigned to the activities studied may err on the low side. A majority of the subjects were normal, healthy individuals, who were trained in the tasks performed. This might have operated to give results lower than those attained by patients newly assigned to physical activity. However, since work is contraindicated for acutely ill patients, and the tasks utilized can be quickly learned, it is probable that the patients would closely approximate the values obtained in this study.

—By Edward E. Gordon, M.D., Archives of Physical Medicine, April, 1952.

COLONEL WERGELAND REPORTS ON KOREA

United States troops are getting better medical care than ever before thanks to the effectiveness of the Armys medical training program, Col. Floyd L. Wergeland, Chief of the Education and Training Division, Office of the Army Surgeon General, reported on his return from a recent trip to Korea.

Colonel Wergeland, who visited Korea, Japan and other points in the Far East in company with Maj. General George T. Armstrong, the Army Surgeon General, said that he considered the continuance of the Army educational system, set up prior to World War II for officers and enlisted men, to be among the three fundamental reasons for the success of the Army Medical Corps. The others, in the opinion of Colonel Wergeland, are the high standard of medical education in the United States and the indomitable spirit of the typical American who when presented a challenge follows through regardless of circumstances.

Splenomegaly in a patient who has congestive cardiac failure should arouse the suspicion of the clinician that constrictive pericarditis is present.

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THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

A COURSE OF ACTION FOR AMERICAN MEDICINE

The new President of the American Medical Association, Dr. Edward J. McCormick of Toledo, Ohio, addressed the House of Delegates at the June meeting of the A.M.A. in New York and outlined a nine-point program for further improvement of the nation's medical care.

As a prefix to his remarks, the Ohio surgeon said he hoped that the further development of the program "will solve many of medicine's problems and eliminate much of the criticism to which we are subjected." From a professional and organizational standpoint, every physician should be acquainted with the nine-point program Doctor McCormick has advanced.

Following are excerpts of the proposals he made to the House of Delegates:

1. The distribution of doctors is a problem. Much is being done by medical organizations to solve it. Thirty-seven states now have placement services, 32 being operated by state medical associations (including Nebraska). Medicine must actively aid those communities which are trying to attract doctors.

2. Over 600 of our county medical societies now have 24-hour emergency call services. I urge all others to adopt such a system.

3. Every medical society must have a strong and fearless mediation committee to hear patients' complaints. These must not be whitewash committees. They must reprimand and discipline physicians found guilty of exploiting their patients. Only in this way can public confidence in medicine be maintained.

4. Physician and hospital relationships need to be clarified and steps taken toward mutual cooperation. I advise the formation of physician - hospital committees to work toward better relations in local communities.

5. Every county society should become an active unit in the nation-wide effort to develop and expand voluntary health insurance.

6. Too many physicians have been isolationists within their communities. We physicians should be rendering health leadership in all service clubs, fraternal organizations, parent - teachers groups, church associations and unions.

7. Every doctor must be brought to realize that good public relations begin in his or her office—that the way in which they treat patients reflects for good or ill on the entire profession. Efforts to build public understanding are frequently hampered by the doctor who overcharges, the doctor who rudely refuses to answer night calls, or the doctor who keeps patients waiting for hours in his reception room without explanation.

8. All county and state associations should make continued efforts to develop a close association with writers for press, radio and television.

9. There is need for unity within the profession. I have noticed a distressing regression toward petty internal wrangling, charges and countercharges, and divisive activities by various groups within the profession.

DATES SET FOR THE 1953 POST-GRADUATE COURSES

Dates for the 1953 third annual Regional Postgraduate Courses have been set for September 28, 29, 30 and October 1, 2 and 3 by your Speakers Bureau Committee, sponsors of this postgraduate activity. The 1953 courses will be conducted in much the same manner as those held in 1951 and 1952.

Sites of the two previous groups of courses were Scottsbluff, North Platte, McCook, Grand Island, Norfolk and Beatrice. It is planned now, however, to hold the courses in different towns, but in the same general areas as in the past. Final plans on this point are yet to be formulated.

Subject matter of the courses this year will be polio, fracture, heart, diabetes, endocrine disturbances in children, and cancer. An outstanding slate of guest lecturers is again being arranged. Names of these physicians will be announced at a later date.

Your Speakers Bureau Committee cordially invites every member of the state medical association to attend these courses. Their purpose is to bring first-class postgraduate education as close as possible to the homes of all physicians in the state. Comment from doctors on the 1951 and 1952 courses was exceedingly complimentary in every instance. Please make your plans now — by marking your calendar — to attend the courses this year. Watch the bulletins and journal for further details.

News and Views

St. Mary's Hospital, Nebraska City, has been approved by the American College of Surgeons.

The York County Medical Society and York P.T.A. have recently sponsored a program of diptheria immunization and smallpox vaccinations. City health officials urged everyone to take advantage of this opportunity.

Thirty-four boys and girls have just completed a fourteen-day period at the Camp Catron Diabetic camp near Nebraska City. The gates closed after parents arrived at the camp to take their children home for the remainder of the summer vacation.

From the Grand Island Independent:

St. Francis Hospital has added three new items of equipment to its polio department. Included are a non-pressure steam sterilizer, a bed 'sit-up-chair' and a 'Hoyer' lifter for transferring patients to wheel chairs and tubs. All are scheduled for delivery by the end of June. A Hubbard therapy tank and exercise table were recently installed in the physical therapy division.

From the Fairbury Journal:

The will of the late Frank J. Fujan of near Milligan has been filed for probate in Fillmore county, says the Geneva Signal.

The will bequeathes a sister, Anna Fujan, household goods and six milk cows. The balance of the estate, real estate and personal property, is to be converted into a trust fund, with Dr. A. C. Blattspieler of Tobias as trustee. Proceeds from the trust fund are to go to Anna Fujan during her lifetime. After her death the will provides that the principal go to the Nebraska Medical Foundation, Inc., for the sole purpose of cancer research.

John Latenser & Sons have been hired by the University of Nebraska Board of Regents to draw a master plan for the six-million-dollar medical building program at the College of Medicine.

Dr. F. Lowell Dunn, president of the Nebraska Heart Association, announced the appointment of Lloyd L. Wagnon of Milwaukee as their new Executive Director. Mr. Wagnon was program secretary to the Milwaukee County Heart Association before coming to Nebraska.

Dr. Dunn stated that, "with the continual increase of deaths and illness from heart diseases, is the responsibility of the Nebraska Heart Association to promote year round activities aimed at the control and prevention of heart disorders."

"Our educational program," reported Mr. Wagnon "will be developed to get the latest proven results of research into the practice of the doctors and other professional workers as quickly as possible."

The State heart unit is an affiliate of the American Heart Association and raises funds for their programs through the February Heart Fund Drive.

The opening of the new Lundberg Memorial in Creighton, has been delayed due to the slow delivery of some equipment and supplies. The hospital will open as soon as the few remaining pieces of equipment arrive. Under the management of the Lutheran Hospitals and Homes Society, the hospital will be the ninth to be operated by this organization.

Dr. Max Fleishman, Omaha, is the Governor for Nebraska, of the American College of Chest Physicians. This organization was attended by 1,200 members and guest physicians during its recent meeting in New York City. Its next annual meeting will be held in San Francisco, Calif., June 17-20, 1954.

It will be forty years since London was host to the American College of Surgeons, when a similar event takes place May 17-19, 1954.

The Public Health Service's new Clinical Center at Bethesda, Maryland was formally dedicated by Mrs. Eveta Culp Hobby, Secretary of the Department of Health, Education, and Welfare, at ceremonies held Thursday, July 2, 1953. Four days later, July 6, the first patients were received in this 14-story medical research center, which combines specially designed space and equipment for laboratory and clinical investigation with facilities for the care of 500 patients.

Dr. Edward H. Skinner of Kansas City (posthumously), and Dr. Arthur C. Christie of Washington, D.C., received the ninth and tenth gold medals bestowed by the American College of Radiology. Dr. John S. Bauslog, president of the College made the presentations at the annual meeting in February, 1953.

The Council on Pharmacy and Chemistry presented an article by Osgood entitled "Hypoplastic Anemias and Related Syndromes Caused by Drug Idiosyncracy."* This is a very enlightening discussion. It contains the following table which may be useful to keep in mind, or at hand for reference:

TABLE 1

CLASSIFICATION OF DRUGS THAT MAY PRODUCE AN IDIOSYNCRASY CAUSING HYPOPLASTIC ANEMIA OR RELATED SYNDROMTS

Classification	Estimated Relative Risk†
Anticonvulsants	
Methyl-phenyl-ethyl-hydantoin (Mesantoin)	High
Trimethadione (Tridione)	Moderate
Antihistaminics*	
Phenothiazine-type (Phenergan)	Moderate
Ethylenediamine-type (Pyribenzamine hydrochloride)	Low
Antimicrobial agents	
Arsenobenzols	High
Chloramphenicol (Chloromycetin)	High
Sulfonamides	Moderate
Thiosemicarbazone* (Tibione)	Moderate
Streptomycin	Low
Antithyroid agents	
Thiouracils*	High
Methimazole (Tapazole)	Moderate
Sedatives	
Allylisopropylacetylurea† (Sedormid)	High
Aminopyrine* (Pyramidon)	High
Phenacemide (Phenurone)	Moderate
Pyrithyldione (Presidon)	Low
Spasmolytics	
Phenothiazines* (Diparcol)	Moderate
Procaine amide* (Pronestyl) hydrochloride)	Low
Unclassified group	
Gold preparations	High
Phenylbutazone (Butazolidin)	High
Nitrophenols*	High
Mercurial diuretics	Low
Quinidine†	Low
Quinacrine hydrochloride (Atabrine dihydrochloride)	Low

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*Osgood. Edwin E.: J.A.M.A. 152:816. June 27, 1953.

In his summary Osgood makes the following significant statement: "Some risk of drug-induced hypoplasia is unavoidable. Drugs that are known to carry a greater risk than the disease for which they are given should never be administered . . ."

The following, from American Medical Association News Notes, Vol. 2, No. 7, speaks emphatically for the interest of the practitioner of medicine in supporting medical schools that will remain free of the regimenting influences of the Federal Government:

AMERICA'S DOCTORS GIVE TO MEDICAL EDUCATION

More than one million dollars has been donated to medical education by physicians in the United States since the first of the year. Reports released by the American Medical Education Foundation indicate that approximately 11,000 physicians have contributed $800,000 to the Foundation since Jan. 1. At the same time, records from 33 of the nation's 79 accredited medical schools show that 8,217 doctors have contributed $301,426.42 directly to their alumni organizations. These figures indicate that 9.9 per cent of the nation's physicians have given in excess of one million dollars this year to help alleviate the financial stress in medical education today.

Labor has made it clear to Blue Cross and Blue Shield that health insurance by way of these agencies is too little and too slow to suit them. Now, big industry is echoing the statements of organized labor. Recent speeches by Dr. Robert Collier Page, general medical director of New Jersey Standard Oil, and by Benson Ford, who is president of the Henry Ford Hospital and general manager of Lincoln-Mercury, have emphasized that they agree with organized labor's position in this matter.

Amongst other significant statements Ford said, in his recent address to the Wisconsin Blue Cross, "I think that inclusive health care should provide to every citizen, at a cost that he can reasonably meet, all the services necessary to keep him healthy and productive. Ultimately it must involve preventive, diagnostic care as well as curative. . . . While progress toward the ideal of an inclusive health system must be evolutionary, it must evolute visibly—at something more than a snail's pace."

Ford has issued this warning but he believes that private enterprise can do the job and that intervention by the Federal Government is not necessary.

STATUS OF DOCTOR DRAFT ACT

Public Law 84, 83rd Congress, amending and extending the Doctor Draft Act through June 30, 1955 was signed by the President on June 29. The following is a brief enumeration of the provisions which will be applicable for the period stated:

1. WHO MUST REGISTER? All physicians, dentists and veterinarians under 50 years old must register with their local draft boards. Men graduating from medical school must register within 10 days. Doctors must register under this act even if previously registered with local board. Members of reserve components of armed services are excluded.

2. HOW MUCH SERVICE REQUIRED? Maximum under draft, 24 months if prior duty less than nine months; 21 months if prior duty 9 to 12 months; 18 months if prior duty 12 to 15 months; and, 15 months if prior duty 15 months or more. This applies to reservists as well as registrants.

3. Priority 2 doctors with 17 or more months prior service are classified as priority 4.

4. No doctor with 21 months prior service can be called during life of present act, excepting in time of war or national emergency declared by Congress.

5. Men in active service who would not have been called had this law been in effect must be released within 90 days, but they must apply for release.

6. WHAT CHANGES MADE IN PRIORITIES? Four priorities are continued. New law lowers from 21 to 17 the number of months of active duty to move a man from priority 2 to 4. It credits all active service of any nature subsequent to Sept. 16, 1940, instead of only service after receiving professional degree.

7. WHAT CONSTITUTES PRIOR ACTIVE DUTY? (1) Duty in Army, Navy, Air Force, Marine Corps, Coast Guard, or Public Health Service. (2) Non-military duty prescribed for conscientious objectors. (3) Wartime military service with any World War II ally of the U.S. (4) Service with Panama Canal Health Department during World War II.

8. WHO IS ELIGIBLE FOR DEFERMENT? Local boards, upon advice from appropriate advisory committees to Selective Service, may defer because of (1) esssentiality to community, (2) extreme personal hardship, (3) certain teaching posts in medical schools, and (4) esssential laboratory and clinical research.

9. EQUALIZATION PAY—$100.00 a month continued for all commissioned physicians and dentists (except interns) and is extended to veterinarians.

10. WHO MAY RESIGN COMMISSION? Only reservists who would be liable for the draft except for their membership in reserve component, and then only on completion of the period of obligated service.

11. ARE ALIENS ELIGIBLE FOR COMMISSION? Under the doctor draft act a doctor is no longer held ineligible for commission solely on ground that he is not a citizen of the U.S.

12. HOW IS DUTY WITH THE U.S.P.H.S. CREDITED? Full credit is given for service in this branch. The Surgeon General must approve the termination of a commission if the time served is to be credited under the doctor draft law.

MOULTON COMMISSION RECOMMENDS CARE OF MILITARY DEPENDENTS

A five-man commission appointed by Secretary of Defense, under the chairmanship of Dr. Harold G. Moulton, studied the problem of care of military dependents for ninety days and made the following recommendations:

1. Health care of dependents is justifiable, not as a right but as a policy.

2. It should be extended to include those who may have been excluded because military facilities were remote.

3. This extension should utilize civilian physicians, on a fee basis. It would be confined to diagnosis, care of acute medical and surgical conditions, treatment of contagious diseases, immunization, and maternity-infant care.

4. The term "dependent" is redefined. Provision for payment of part of the cost by the recipient is recommended. Certain diseases, conditions, devices and appliances are specifically excluded.

Announcements

The thirty-ninth annual Clinical Congress of the American College of Surgeons will be held at the Conrad Hilton Hotel, in Chicago, Oct. 5-9, 1953. A variety of educational features will include formal papers, panel discussions, symposia, postgraduate courses, forums, motion pictures and colored TV. Address Dr. Thomas C. Douglas, Northwestern University, Chairman, of the Chicago Committee on Arrangements.

Formal announcement will be issued in October giving full details of the Second International Congress of Cardiology to be held in Washington, D.C., Sept. 12-15, 1954. In addition to the scientific sessions there will be a reception, a banquet, sightseeing tours and post-congressional tours to visit a number of the leading cardiac clinics in the United States and Canada.

The University of Colorado School of Medicine announces a three-day postgraduate course in "Infectious Diseases" to be held at the University, in Denver, August 17-19, 1953. Rikettsial and virus diseases will be stressed. Write the Office of Graduate and Postgraduate Education, University of Colorado Medical Center, 4200 East Ninth Ave., Denver 20, Colorado.

The Department of the Army has announced the following Postgraduate Short Courses for 1953-1954:

Brooke Army Medical Center, Fort Sam Houston, Texas, Clinical Laboratory Course, March 15-19, 1954.

Fitzsimmons Army Hospital, Denver, Colorado, Symposium on Pulmonary Diseases, Sept. 21-25, 1953; Clinical Electrocardiography and Recent Advances in Cardiovascular Diseases, Nov. 9-14, 1953.

Letterman Army Hospital, San Francisco, Calif., Rehabilitation Techniques in Neuromuscular Diseases and Disabilities, April 5-10, 1954.

Armed Forces Institute of Pathology, Washington, D.C., Forensic Pathology, Nov. 2-6, 1953; Pathology of the Oral Regions, March 8-12, 1954.

Walter Reed Army Medical Center, Washington, D.C., Seminar in Urology, Sept. 7-9, 1953; Symposium on Circulation and Homeostasis, Oct. 5-9, 1953; Symposium on Physical and Mental Health Standards, April 16-17, 1954; Recent Advances in Medicine and Surgery, Including Psychosomatic Aspects, April 19-30, 1954.

These courses are open not only to Army personnel who constitute Priorities I and II, but to a number of civilians, providing there are vacancies. Civilian physicians desiring any of these courses should forward their applications directly to the installation to which they desire to go.

A Postgraduate Assembly in Endocrinology and Metabolism, co-sponsored by The Endocrine Society and the University of Minnesota Medical School, will be held on the University of Minnesota campus from September 28 to October 3, 1953. All aspects of clinical endocrinology and metabolism will be taken up, and recent important advances in the field will be stressed. Write Robert B. Howard, M.D., Director, Department of Continuation Medical Education, University of Minnesota Medical School, Minneapolis 14, Minn.

The American Urologic Association makes the following announcement:

UROLOGY AWARD

The American Urological Association offers an annual award of $1,000.00 (first prize, $500.00, second prize, $300.00, and third, $200.00) for essays on the result of some clinical or laboratory research in Urology. Competition will be limited to urologists who have been in such specific practice for not more than ten years, and to men in training to become urologists. Write to William P. Didusch, Executive Secretary, 1120 N. Charles St., Baltimore, Md., for details.

American College of Chest Physicians, together with state chapters and local hospitals, will sponsor (1) the Eighth Annual Postgraduate Course on Diseases of the Chest, to be held at Hotel Knickerbocker, Chicago, Sept. 28 to Oct. 2, 1953 and, (2) The Sixth Annual Postgraduate Course on Diseases of the Chest, at Hotel New Yorker, N.Y. City, Nov 2-6, 1953. Tuition for each, $75.00. Write Executive Director, American Chest Physicians, 112 E. Chestnut St., Chicago 11, Ill.

The Blakiston Company, Inc., formed the Medical Book Guild of America, some months ago. Like other book guilds this one provides important medical books to physicians at a substantial saving. There is considerable choice of titles and membership requirements are fulfilled by taking as few as four books in a year. Write for details to Blakiston, 575 Madison Ave., New York 22, N.Y.

Coming Medical Events

POSTGRADUATE COURSE IN ENDOCRINOLOGY, September 22, 23 and 24, 1953, University of Nebraska College of Medicine, Omaha, Nebraska. Elton Newman, M.D., University of Nebraska College of Medicine, 42nd and Dewey Avenue, Omaha 5, Nebraska.

NEBRASKA STATE MEDICAL ASSOCIATION REGIONAL POSTGRADUATE CIRCUIT COURSES, September 28, 29, 30, October 1, 2, 3, 1953. (Towns to be announced later).

COLORADO STATE MEDICAL SOCIETY, 83rd ANNUAL SESSION, September 29, October 2, 1953, Denver, Colorado. Mr. Harvey Sethman, 835 Republic Building, Denver 2, Colorado.

OMAHA MID-WEST CLINICAL SOCIETY 21st ANNUAL ASSEMBLY, October 26-30, 1953, Hotel Paxton, Omaha, Nebraska. Miss Irene Rau, 1306 Medical Arts Building, Omaha 2, Nebraska.

CRIPPLED CHILDREN'S CLINICS—

- August 8, North Platte, Knights of Columbus Building
- August 15, Chadron, Elks Club
- August 29, Hastings, Mary Lanning Hospital
- September 26, Kearney, Good Samaritan Hospital
- September 12, Broken Bow, High School.
- October 10, O'Neill, High School
- October 24, Wayne, Benthack Hospital

NEBRASKA STATE RADIOLOGICAL SOCIETY, October 21, 1953, Veterans Administration Hospital, Lincoln 1, Nebraska.

Deaths

Ernest T. Manning, M. D., Omaha. Doctor Manning died on June 3, 1953, at the age of seventy-five. His illness was sudden and brief. Death was due to acute coronary thrombosis.

S. H. O'Neill, M.D., Blue Hill. Doctor O'Neill had practiced medicine at Blue Hill since 1921. He died at his home on June 3, 1953, after a year of illness. He was seventy-six years old at the time of his death. He is survived by his wife.

F. E. Nail, M.D., Franklin. Doctor Nail was injured in an automobile accident on May 3, 1953, and died as a result of his injury on May 8. He was just under seventy-three years old. He is survived by a daughter, Mrs. Cathryn Cannon of Lanikau, Hawaii; and a sister, Mrs. P. J. Weirich, of Adams, Wis.

The dark-colored compounds in raw sugars are formed when cane juice is boiled. Their vitamin content is low, and they are nutritionally valueless.

REPORT OF THE DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION MEETING

Your delegates, Dr. Joseph D. McCarthy, and the undersigned, were in attendance at the 102nd Annual Meeting of the American Medical Association held in New York City on June 1-5, 1953. Augmenting the Nebraska delegation were President James Kelly, President-elect Earl F. Leininger, Executive Secretary M. C. Smith, and Editor George W. Covey.

This meeting was the largest ever held in the history of the Association. The final total registration reached nearly 40,000, including 18,000 physicians.

At this meeting the House of Delegates took important policy-making actions on Veterans' Medical Care, Medical Ethics, Osteopathy, Intern Training, and a wide variety of other subjects. Full discussion of these subjects will be found in the published proceedings of the House of Delegates in your A.M.A. Journal.

Highlights of the opening day's session were addresses by Dr. Louis H. Bauer as retiring President, Dr. Edward J. McCormick as President-elect, and Mrs. Oveta Culp Hobby, United States Secretary of Health, Education, and Welfare. All of these were enthusiastically received. Also on this day the winner of Distinguished Service Award was selected, Dr. Alfred Blalock, because of his outstanding work in Vascular Surgery.

The Woman's Auxiliary, through its President, Mrs. Ralph Eusden, presented a check for $10,000 for the American Education Foundation, to its President, Dr. Elmer E. Henderson.

Russel F. Standacher, Secretary of the Student American Medical Association, was loudly applauded when two of the councilors of his Association presented a check for $10,000. This represented partial repayment of a loan, granted by the A.M.A., to finance the publication of the Journal of the Student Medical Association. This loan was granted in 1951.

William P. Marcum of Louisville, Kentucky, was presented to the House of Delegates as the 26 millionth subscriber to the Blue Shield Plan.

A large number of distinguished Foreign and American guests were presented to the House of Delegates.

The following officers were elected:

President-Elect—Dr. Walter B. Martin, Norfolk, Va.
Vice President—Dr. Carl Gellenthien, Valmora, N.M.
Secretary—Dr. George F. Lull, Chicago, Ill.
Treasurer—Dr. J. J. Moore, Chicago, Ill.
Speaker of the House—Dr. James J. Reuling, Bayside, N.Y.
Vice Speaker—Dr. E. Vincent Askey, Los Angeles, Calif.
Board of Trustees—Drs. Hamilton and Gunderson were elected to succeed themselves. Dr. Julian P. Price was elected to fill the unexpired term of Dr. Walter B. Martin.

Your delegates urge you to read the entire proceedings and especially those parts relative to Veterans' Care, Ethics, and Osteopathy, as published in the Journal.

Respectfully submitted,
K. S. J. HOHLEN.

Nebraska State Department of Health

LABORATORY EXAMINATION BY THE PUBLIC HEALTH SERVICE AND COMMUNICABLE DISEASE CENTER LABORATORIES

It is the stated policy of the Laboratories of the Communicable Disease Center, Public Health Service, to assist and supplement, but not to duplicate, the work of the various State Health Department Laboratories. These Laboratories have the general policy of accepting suitable specimens submitted by or through State Laboratories, but of not accepting those submitted directly. Further, State Laboratories have been encouraged not to forward specimens if the State Laboratory provides the service, and to act as intermediary in obtaining esssential information relating to specimens which they forward.

In the case of many types of work carried out by these Federal Laboratories, the special subjects have not been developed to the point of routine application of laboratory procedures, and more than usual information is required because of the research features involved. It is believed that proper use of the facilities of these Federal Laboratories can be aided if pertinent information be furnished Nebraska physicians. Accordingly, much of the following is quoted directly from releases from the Communicable Disease Center.

LEPTOSPIROSIS

> As in most of the acute infectious diseases in which "agglutinins" are present in "normal' sera little diagnostic significance can be attached to a single serologic test. In the future only paired specimens of serum will be tested routinely for leptospirosis. The first specimen should be obtained as soon as possible after onset of symptoms, preferably during the first week. Approximately two weeks should elaspe before the second specimen is obtained. The first specimen will be held until the second is received. It would be preferable for the first specimen to be held at the state laboratory until the second is received, forwarding both specimens together to CDC. Whenever possible, the date of onset of symptoms, the dates on which the specimens were collected, and any other pertinent clinical information available should accompany the specimens.

Currently, about ten immunological strains of leptospira are used as antigens by the C.D.C. Laboratories in testing for leptospiral antibodies. The Laboratory of the Department of Health has antigen material of but one type, L. Pomona. This is the type believed to be usually encountered in livestock infections in this area.

This Laboratory at present will forward Leptospirosis specimens to the Federal Laboratories in accordance with the above paragraph. It is requested that specimens be submitted for this type of examination only if apparently merited, and that adequate information be supplied to accompany the specimens.

AMOEBIASIS

> The results obtained with the complement fixation test over the past three years have been confusing. Until such time as more evaluation as to significance of either positive or negative tests has been accomplished, the complement fixation test for amoebiasis will be discontinued as a routine procedure. The test will be performed only on those sera which are accompanied by pertinent clinical history and when two stool specimens have been examined on the patient. The stools may be examined in the State Laboratory or forwarded to CDC according to the wishes of the State Laboratory Director.

In the past there have been two periods of time in which the State Laboratory was making complement fixation tests for amoebiasis. These were considered experimental ventures. This test is not at present being performed in this Laboratory. It is the desire of this Laboratory to forward blood specimens to the Federal Laboratories for this test only after three suitable specimens have been examined by this Laboratory. A pertinent clinical history should be furnished to accompany each blood specimen forwarded for this test.

TOXOPLASMOSIS

> Technical difficulties in carrying out this test have recently been encountered. As a result, many runs have been unsatisfactory. A number of sera have accordingly accumulated on which no report has been rendered. In order that all tests will not be unnecessarily delayed in performance and reporting, current specimens will be processed as received. The backlog which has accumulated will be processed as rapidly as facilities permit.
>
> We would like to again emphasize that we are following the recommendations of the National Committee on Toxoplasmosis and are accepting for testing only sera from cases of suspected congenital toxoplasmosis or mothers of suspected cases of congenital toxoplasmosis. It is particularly important that we adhere to this recommendation in order to more effectively utilize our limited facilities.

This Laboratory has a small supply of information blanks, available on request, to supply information on specimens for toxoplasmosis examinations. Specimens of the one type mentioned in the above quoted paragraph may be submitted direct to the C.D.C.

Laboratories at Atlanta, Georgia, and the information as required by this form follows later. Specimens from types of toxoplasmosis cases other than that identified in the above mentioned paragraph should not be submitted to either this or the Federal Laboratories.

L. O. VOSE.
Director of Laboratories,
State Department of Health.

Know Your Blue Shield Plan

Membership in the 78 non-profit medically sponsored medical care plans over the nation is now 26 million, with new members enrolling at the rate of 12,000 every working day.

In 1952, the total earned income of all Blue Shield Plans was $262,992,310. Of this amount, 79.81% went to physicians for services rendered to members, 11.97% was used for operating costs. and 8.22% was retained in reserves.

More than 122,000 physicians participate in Blue Shield Plans, and of these, 96,392 have signed participating agreements with Plans offering service benefits. In areas served by Plans, 89% of physicians in private practice are participating.

Sixty of the 78 Blue Shield Plans offer service benefits. This means that Participating Physicians agree to accept the Plan's schedule of fees for services rendered to patients whose incomes are less than the agreed-upon ceilings. When the patient's annual income is above the ceiling limit, the fee is paid as an indemnity, and the physician is free to charge over and above the Plan payment.

CASES AND PAYMENTS IN 1952
ALL BLUE SHIELD PLANS

	Cases	Paid
Maternity	$ 574,714	$ 35,087,282
Appendectomies	173,855	17,682,153
Tonsillectomies	434,922	14,354,369
Herniotomies	60,595	5,401,046
Hemorrhoidectomies	75,318	4,450,251
All Other Surgery	2,086,831	90,167,098
Medical Care	807,559	20,081,265
Anesthesia	296,918	7,608,089
X-ray	407,275	7,994,869
Other Ancillary	787,110	5,648,687
Total	$5,705,097	$208,475,109

No mass screening effort is complete until every person examined has received a final diagnosis and is assigned to a definite category for follow-up and treatment. Arthur C. Christie, M.D., J.A.M.A., January 10, 1953.

Human Interest Tales

Communications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. Van H. Magill, Curtis, is the new president of the Curtis Rotary Club.

Dr. V. D. Norall, Lexington, has moved to his new office at 312 East 6th Street.

Dr. J. E. Ingram, Nelson, made his first trip to town since his accident in February.

Dedication services were held on June 14th for the new Beemer Clinic of West Point.

Dr. Frank T. Hamilton, Friend, left July 4th to visit his two brothers in Pennsylvania.

Dr. A. C. Barry, Norfolk, has been elected Commander of the local American Legion Post.

Dr. R. R. Douglas, Clarks, was recently honored for his 40 years of service to the community.

Dr. James H. Maynard, West Point, has reported for Army duty at Fort Sam Houston, Texas.

Dr. William Shepherd, Falls City, was injured in an auto collision during the early part of June.

Dr. George Lloyd John, of Coleman, Texas, is now practicing at the Bell and Bell Clinic in York.

Dr. John Broz, Alliance, has resumed his practice after being hospitalized for several weeks in Omaha.

Dr. C. H. L. Stehl, Scribner, has announced that he is resigning from the City Health Department.

Dr. W. E. Holmes, who formerly practiced at Gering, is now associated with Dr. Joe T. Hanna at Scottsbluff.

Dr. K. C. McGrew, Orleans, has resumed practice after spending a few days at the Peterson Hospital in Holdrege.

Dr. Louis L. Erickson, West Point, has been inducted into the Navy and is now stationed at Norfolk, Virginia.

Dr. Theodore Haller formerly of Blair is now in the practice of general surgery at New Bedford, Massachusetts.

Dr. John W. Tanner and family of Elkhorn, have moved to Omaha. Doctor Tanner will maintain the office at Elkhorn.

The Lutheran Hospital, Grand Island, has employed a full time anesthetist. She is Miss Anna Berg of Dannebrog.

Dr. H. D. Myers, Schuyler, recently spent two weeks at the Cook County Post-graduate School of Medicine in Chicago.

Dr. L. H. Cowan, Scottsbluff, escaped injury when he was forced to take to a ditch to avoid hitting another machine headon.

Dr. Edwin B. Bradley recently announced his retirement from the practice of medicine after fifty years in the profession.

Dr. A. E. Stejskal, Schuyler, has recently returned home from the Mayo Clinic where he has been a patient for several weeks.

Dr. Bryon Peterson and family are returning to the States from Alaska, where Doctor Peterson has been serving with U. S. Army.

Dr. J. P. Murphy, formerly of O'Neill, is extended the deepest sympathy of the Nebraska State Medical Association, on the death of his wife.

Dr. Frank A. Brewster, who practiced at Holdrege for many years, announced in June that he intends to begin practice in Franklin "in the near future."

Dr. Joe Volk, Giltner, is now located at Torrington, Wyoming. Dr. Volk is a graduate of the University of Nebraska College of Medicine of Omaha.

Dr. Russell P. Carter and Dr. James H. Coffey, Blair, have recently received their degrees of Doctor of Medicine from the University of Nebraska College of Medicine.

Dr. William H. Schmitz Jr., Omaha, and Miss Mary V. Schweiger, Omaha, were married recently at St. Margaret Mary's Church. The couple will make their home in Chicago.

Mr. John O'Neal and Miss Ruth Husak were united in marriage on June 21 in Columbus. Mr. O'Neal is working for his doctor's degree at the University of Nebraska Medical College.

Mr. Eugene Sucha, Fremont, and Miss Marguerite Cakl, were united in marriage on June 16th in Clarkson. Mr. Sucha is now a student at the Creighton University School of Medicine.

Dr. G. D. Conwell and family of Norfolk, have returned home after vacationing in the east. While there, Doctor Conwell also attended the annual meeting of the A.M.A. in New York.

Dr. Leonard E. Alkire, Lexington, and Miss Anne Lear, Omaha, were married June 18 in Omaha. Doctor Alkire is interning at the army hospital in Fort Lewis near Tacoma, Washington.

Dr. Maxine Bennett, Cambridge, will assume her new position of Associate Professor in the University of Wisconsin Medical School in the Department of Otolaryngology, on August 1st.

Dr. Fred F. Whitcomb Jr., Omaha, has returned to New York City to begin internship at Bellevue Hospital. He is a graduate of Columbia University College of Physicians and Surgeons.

Dr. Charles G. Muffly, Meadow Grove, and Miss Mary Joan Connealy were married May 29 in Tekamah. Doctor Muffly is a graduate of the University of Nebraska College of Medicine.

Dr. Bernard A. Owen, formerly of Oconto has begun general practice at the Hemingford Clinic. Doctor Owen recently finished his internship at the Porter Sanatarium and Hospital in Denver.

Dr. Vincent W. Lauby, Scottsbluff, and Miss Alice Jean Young, New Castle, Pa., have announced their engagement. Dr. Lauby is a graduate of the University of Nebraska College of Medicine.

Dr. Peter Isacson, son of Dr. and Mrs. Sven Isacson, Omaha, left for a visit to New York City and then on to Cleveland, Ohio where he will intern at the Cleveland Western Reserve Hospital.

Dr. Jim Maillard, Osmond, has returned home from Boston where he has completed his internship in internal medicine at Boston City Hospital. Doctor Maillard will take up residence in Omaha.

Dr. James Hayhurst, Scottsbluff. was speaker at the meeting of the Cheyenne-Kimball-Deuel Medical Society held in Sidney. Doctor and Mrs. B. H. Grimm were hosts at their home for the meeting.

Dr. R. A. Cutshall, Oxford, will report August 3rd for duty with the armed forces. This leaves the community without a doctor since Dr. C. D. Evans' health will not permit him to practice at this time.

Dr. Nadene Coyne, O'Neill, is completing a two-week course in cerebral palsy at the Cook County Graduate School of Medicine in Chicago. Doctor Coyne is a resident in physical medicine and rehabilitation at New York's Bellevue Hospital.

Dr. C. B. Dorwart, Sidney, has an assistant for the months of July and August, he is Dr. Lloyd O'Holleran, Omaha. Doctor O'Holleran is a graduate of Creighton University School of Medicine and has just completed his internship at St. Joseph's Hospital in Omaha.

Dr. C. E. Wiltse, Shelton, has been called to Omaha for a physical examination and expects to be called to the service within the next few weeks. Dr. J. T. Nordstrom, Shelton, who was associated with Doctor Wiltse in the practice of medicine before being called to service, recently received a discharge from the Army. Doctor Nordstrom expects to resume practice following a short vacation.

Dr. and Mrs. Paul Martin, Ord, were hosts at the regular meeting of the Four County Doctors. The guest speaker was Dr. John Brush of Omaha. Those present were Dr. and Mrs. Bentley, Scotia, Dr. and Mrs. Otis Miller, Dr. and Mrs. C. J. Miller, Dr. and Mrs. Lynn, Dr. and Mrs. Frank Perry, all of Ord; and Mrs. Moss and Dr. Moss of Arcadia. Dr. and Mrs. Zempel, Burwell, and Dr. and Mrs. Barta, who were visiting in Ord at the time of the meeting.

The following items are taken from the Statistical Bulletin, Metropolitan Life Insurance Company, January, 1953, V. 34, No. 1.

"The long-term decline in mortality has been quite remarkable, the death rate in recent years being little more than one-half that of 40 years ago . . ."

"One of the most notable features of the year's record was the remarkable decline in the mortality from tuberculosis. The death rate dropped 25 per cent last year to a new low of 13.5 per 100,000 insured . . . Mortality from the disease is now only one-half that four years ago and one third that a decade ago; the reduction has amounted to 94 per cent since 1911."

"In the general population of the United States the maternal mortality rate last year was somewhat less than 7 per 10,000 live births. Currently, there is only one maternal death for every 1,500 births, whereas as recently as a decade ago the ration was one such death in every 400 births."

The Nebraska State Medical Journal

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EDITORIAL

MORE HELP FOR MEDICAL EDUCATION

Our medical schools must have more financial help. It has been pointed out to us many times that if no other sources of this aid can be found and developed, the Federal Government may supply the money and, through this avenue of approach, gain control of medical education. During the sessions of the House of Delegates of the American Medical Association in New York last June, the need, and the necessity of fulfilling it were succinctly stated by Mrs. Oveta Culp Hobby, Secretary of the Department of Health, Education and Welfare. The following quotation from her address summarizes the matter very well:

"There remains another area where pressure of need is compelling a review of all possible methods of solution, and that is the area of medical education, where the financial crisis is growing. A recent estimate of need for additional support by medical schools, based on data accumulated by the Association of American Medical Colleges, shows that schools need approximately $20 million a year to meet current inadequacies . . . There must be a renewed drive for voluntary support of medical education and increased support by local governments, for these problems of medical education cannot go unanswered." (J.A.M.A., 152:742, 1953).

The expression "cannot go unanswered" implies that if we do not supply the need, the Federal Government may become the donor. That this is not desirable in the opinion of the present Administration has been forcibly expresed by President Eisenhower, as follows:

"Only if our medical schools remain financially solvent can we hope to place medical education on a sound basis, free from the threat of government-sponsored plans and schemes to control it." (From Annual Report of American Medical Education Foundation, 1952). We are in full agreement with this viewpoint.

The goal set by the American Medical Education Foundation has been $2 million per year. In 1951 the total contributions from private sources amounted to $745,000. In 1952, the voluntary contributions totaled over $906,500. The sources of this money were largely doctors, either directly as individuals, or indirectly, through organizations.

In making his report to the House of Delegates, Doctor Henderson expressed confidence that 1953 donations will exceed those of 1952 by a large margin. He based this confidence on the amount collected during the first five months of this year, a total of over $761,600. One hundred and forty thousand more of this came from individual contributors than for the first five months of 1952. In addition, Doctor Henderson indicated that industrial concerns are organizing to greatly increase their contributions to medical education. Their interest will be distinctly accelerated if the doctors continue to meet obligations in this matter.

Doctor Henderson gave Nebraska very special mention when he was reviewing the contributions for 1952. The following is quoted from his report to the House:

". . . Nebraska was perhaps the outstanding state effort, despite the fact that Indiana led them in both dollars and total contributors. Under the leadership of Dr. L. D. McGuire of Omaha, in a 30-day period Nebraska raised $49,146 in cash and obtained almost $33,000 in pledges, payable over the next two years . . ."

Nebraska doctors must be aware that the support of our medical schools is not a one-year effort. It must go on and on. It must be kept in the hands of the medical profession and of local government. It must not become entangled with the Federal Government and with the inevitable control that rides with central government money. We should remember, too, that any dollar we might send to Washington would come back to the medical school as twenty cents. Why not send the dollar directly to the point where it is needed and save the eighty cents. Let us keep Nebraska high on the list!

KEEP THE OLDSTERS OFF THE SHELF

Life expectancy has increased twenty years during the last half century, according to Yost(1). Thirteen million of our population are now over sixty-five years old and 2,700 reach this goal daily. Though the population of the United States has doubled in the last half century, the number who live past sixty-five has quadrupled. The curve indicating steadily increasing longevity is sloping upward sharply and shows no tendency to level off up to this time. The ultimate number in the old-age group is a matter of conjecture.

Through the process of association the words geriatric, longevity, chronic illness and dependency have become somewhat synonymous. It is an error, however, to consider this great segment of our people as being sick, dependent, and of little social or economic value to society, a liability rather than an asset. It is a mistake to forget the human misery that may be the result of putting these people in the discard. As a matter of fact, some industrial concerns have found that many employees who are past the usual retirement age not only are able to work, but often have very few days of illness, are seldom injured, and are able to perform their work with great skill. In other words, many who are in this age-group retain a productive value as high as that of the younger employees.

Many men and women who have been forced to retire because they had reached a certain age have found new posts in other institutions and have been able to equal or to exceed their former accomplishments. They have been able to remain self-supporting, self-respecting, happy people whose work has added to the richness of our economy.

It is true that chronic illness becomes more prevalent amongst people who are in the sunset years. This fact does not spell total inactivity, dependency, loss of economic value, and all the psychic trauma, the injury to the spirit of the man, the state of "vegetation," that has become a connotation of old age. Probably some of the sadder accompaniments of old age and "retirement" can be laid at the door of the doctor in an appreciable degree. The state of mind that encourages this situation has been ably promoted by the stealthy invasion by the paternalistic idea in government which leads to the uncomfortable, dependent state of semipoverty often referred to as "social security." We are interested for the purpose of this discussion, however, in the responsibility that devolves upon the doctor.

The article by Dr. Harold Neu that appears in this issue of the Journal, "Rehabilitation: The Third Phase of Medical Care," furnishes a clue to our past failure and points the way to a more successful care of this large group of people. While it is easier and much less time-consuming to let the hemiplegic patient lie in his soiled bed and be fed and otherwise cared for by anyone who will accept the responsibility, how much better for the patient and for society in general, if he can be taught to sit, to stand, to walk, to feed himself, to take care of his other personal needs, and even to become productive in some sense of the word. Such treatment is wonderful for our social economy but much more wonderful because of its effect upon the human being that is old and sick.

The above illustration concerns one of the more extreme types of disability but there are many thousands of persons with relatively minor conditions who have been permitted to be "on the shelf" because no one had the interest or took the time to put them back into such activity and productivity as their physical and mental conditions warranted.

If we will, we can be instrumental in making many of these people happier, in relieving their burden of loneliness, their longing to die rather than live as they are. We can do this by preparing them for activities that are interesting, that create a new reason for living, and that make them partly if not completely, independent. Such treatment will do as much to prolong life and to prevent the decay of body and spirit as will our medicines. This will be cheating the dole, to be sure, but this can be condoned. Let us help keep the oldsters off the shelf!

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Rehabilitation: The Third Phase of Medical Care

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INTRODUCTION

For centuries acute disease has been the most significant threat to man's survival. Pneumonia, enteritis, tuberculosis, diphtheria, and typhoid fever were the diseases on which medicine was forced to concentrate its energy. In 1900, a mere fifty years ago, 153 in every 100,000 persons died of pneumonia, 116 of enteritis, 95 of tuberculosis, 40 of diphtheria, and 31 of typhoid fever(1). Even in the 20's and the 30's of this century one or two children in each family died of scarlet fever, measles, or small pox. Pneumonia was spoken of as the "old people's friend" because it silently killed so many of them during the severe winters.

These acute diseases presented a grave problem to medicine. They were a threat to society; if men were to survive the rigors of long winters, floods, and dangerous childhood diseases, cures had to be found. As a result, the curative aspect of medicine was foremost in the minds of doctors. Physicians studied how they might most successfully bring such acute diseases to a swift termination. New drugs were developed and surgical techniques were perfected. Immunization by vaccination was utilized to slash the previous death rates.

Once doctors had found the causes of many of these diseases, they sought to find measures by which they might prevent them. Another aspect of medical care — prevention — was made a part of the ever onward advance of medicine. Many illnesses were practically eliminated as causes of death. For example, the reduction of the death rate due to typhoid fever to three per cent of its former level in forty years was a major triumph of sanitary science, an integral part of preventive medicine(2).

Thus the curative and preventive aspects of medical care made great advances, but rehabilitation — the third phase of medical care — which takes the patient from the bed to the job, had so far been grossly neglected(3).

THE IMPACT OF TWO WORLD WARS

In World War I, eight per cent of the casualties who reached the field hospitals died within a short time; in World War II, the rate was lowered to only four per cent. This lowered mortality rate meant that many of the severely injured casualties who would have died in previous wars were now alive, crippled in mind and body(4). During World War I, most paraplegics died within a short time as a result of kidney infection, but with the use of sulfa drugs, penicillin, streptomycin, and new surgical techniques during World War II, a large percentage of these paraplegics lived(5). Men who had lost both their eyes, their arms, their legs, lived because of the advances made in therapeutic medicine. Men who, five years before could not have been given a chance for life, were now saved by new surgical methods. These disabled service men had to be cared for by the service medical corps. As was said at the First Anniversary Celebration of the AAF Convalescent Hospital, at Pawling, New York:

"Our mission isn't completed . . . until our men, through with combat, are restored to noncombat society, whether in the Army or in civilian life, in the best condition it is humanly possible to make the whole man(6)."

This "whole man" became the philosophy of all the services. Physical medicine and rehabilitation became a major department in all the Army general hospitals, and in the Navy a separate division of rehabilitation was started. Thus medical rehabilitation in the services went into full gear so as to give the disabled men the chance for maximum restoration physically, socially, and economically. These programs of the military services, and later of the Veterans Administration, demonstrated that planned, integrated programs of convalescent care, stressing activity as an accessory to definitive treatment, could reduce hospitalization and prevent the harmful psychological sequelae that resulted from extended hospitalization(7).

THE IMPACT OF INDUSTRIAL EXPANSION

But the war was not the only element which caused interest in rehabilitation. With the growth of modern industry and the increased use of power-driven machines in factories and transportation, the danger of accidents and occupational diseases has been so multiplied and is so universally recognized that industry has begun to see the great need for rehabilitation of disabled workers. Once every 15 seconds, or 5,700 times each day, somewhere, an industrial accident happens. Each year 90,000 workers in the United States are permanently disabled as the result of industrial accidents. Added to this group are the more than 2,000,000 other workers who suffer temporary disabilities. The total work lost by these men in 1947 was 280,000,000 man-days, or the equivalent of 1,000,000 men kept out of work continuously for a year. Studying the accident rate of only one year, 1946, one sees that there were 99,000 deaths from industrial and home accidents, 10,400,000 persons suffered disabling injuries, 370,000 became permanently disabled. Motor vehicle accidents resulted in 33,700 deaths in 1946, and left 100,000 persons permanently disabled. This appalling accident rate showed industry and social welfare groups that steps had to be taken to restore these disabled people to some measure of usefulness if they were not to be a terrible burden to society(8).

REHABILITATION — THE ANSWER TO THE PROBLEMS OF MODERN SOCIETY

Rehabilitation is the answer to the problem. It, at one and the same time, provides a means whereby these disabled persons can be refitted into society; and, also, a means whereby the loss of time due to accidents can be effectively reduced.

It is a strange paradox that physical medicine and rehabilitation constitute at the same time the newest and the oldest field of medical therapy. It is the newest because it is only a decade since it has been employed extensively in medical practice. It is the oldest because physical agents have been used since the very beginning of mankind. This aspect of treatment is an extremely broad field of endeavor, with an ancient and noble history, and it has finally begun to assume its rightful position in medical care.

Rehabilitation has been defined as "the process of attempting to improve the health of handicapped people and returning them as useful members of society at the earliest moment(9)." Such a definition gives the basic idea of the field of rehabilitation, but a list of the objectives of rehabilitation might more easily show the scope of rehabilitation as a whole. Rehabilitation includes the employment of all forms of physical medicine in conjunction with psycho-social adjustment and vocational retraining, in an attempt to achieve maximal function and adjustment of the person, to prepare him physically, socially, and vocationally, for the fullest possible life compartible with his abilities and disabilities. The function of rehabilitation is to provide specific methods to: (1) contribute to the more prompt recovery and shorter hospital stay of patients; (2) assist the handicapped patients in adjusting to the demands of an appropriate economic and social environment after their dismissal from the institution, in order to reduce the probability of their eventual re-admission; (3) aid the person whose discharge from a hospital-institution is improbable, to achieve a measure of independence within the confines of the environment forced upon him.

Rehabilitation is designed to restore physical function to a maximum, and to evaluate qualitatively and quantitatively the degree of impairment and the extent of residual capacity in the individual. Retraining in the basic physical skills of daily living is the primary consideration; it is obvious that daily activity-skills are the basis of all future rehabilitation. For, unless the person can successfully cope with problems of everyday living, he will be a burden to those about him and will lose all faith in his own ability.

According to Rusk(10), any comprehensive rehabilitation program must contain four essential elements: (1) physical reconditioning; (2) psychological reconditioning; (3) pre-vocational training and short work experience to help the disabled regain confidence; and, (4) re-socialization or re-orientation. This is an over-all program. Without any of these component parts, no program of rehabilitation can be wholly successful.

The reason rehabilitation encompasses such a broad field of endeavor is that the solution of the complex problems of the disabled individual is accomplished by a team of workers. The various disciplines—medicine, psychology, sociology, and economics—are brought together in: the physician; the nurse; the physical, occupational, and speech therapist; the social worker; the psychologist; the vocational counselor; and others, in order to focus on the individual as a whole in terms of his total environment and total problems. Thus one sees that rehabilitation is concerned with the "whole man." His whole life—physical, social, mental, vocational, and economic—is important, and true rehabilitation is concerned with each phase separately and with the unified whole which makes him what he is.

REHABILITATION AND INDUSTRY

Having gained an idea of the purpose and scope of rehabilitation, it is clearly possible to see the immense aid which constructive rehabilitation offers to industry. As has been previously stated, with the growth of industry the number of employees having permanent and partial disabilities has been greatly increased. It is up to industry, to a great extent, to decide whether handicapped persons are to be given opportunities to be self-supporting through productive labor or are to be dependent upon public assistance. Programs for the rehabilitation of the handicapped should be the same for industrial casualties as they are for military. There should be a re-education, both functional and occupational, to encourage and to hasten social and economic self-sufficiency and the assurance of employment of the rehabilitated(11).

Prior to the last war, many employers would not hire the handicapped because they felt such workers were accident-prone and less efficient. In studies made in eighty-seven great industrial plants, it has been shown that the accident rate of the handicapped is lower than that of the able-bodied worker. It was also shown that the disabled produce at a slightly better rate than did the unimpaired performing on the same jobs. And it is a well recognized fact that nature makes compensation in the abilities of the handicapped worker. The loss of one of the senses often leads to the sharpening of the other senses; men without legs develop more capable hands; men who have no vision develop their sense of touch to the highest degree(12). For this reason, although in the past, industry as a whole has discriminated against hiring persons suffering from chronic illnesses and disabilities on the basis of false assumptions, the strongest supporters of their utilization are concerns, especially small ones, that have hired large numbers of such workers. It was demonstrated in World War II that the disabled compete successfully with their more fortunate fellow workers.

When the physical standards for the use of men in industry were drawn up at the beginning of this century, they were influenced by the "anatomical" concept of medicine. Competence was measured in terms of anatomical perfection. A man could do the whole job or none of it; he was disabled for all work if he was disabled for any part of it. With the development of the "functional" concept, specialization, and subdivision of jobs, the "perfect anatomical specimen" concept was no longer valid in determining suitability for employment. Thus, through World War II, and the changes which took place in industry itself, men came to realize the great possibilities of rehabilitation; but for the most part men still fail to see that the rehabilitation of the severely handicapped is no less valuable economically to the community than the rehabilitation of the less severely handicapped. To teach a helpless person self-care releases others and saves costly care of the individual in an institution or hospital; to teach a severely handicapped person how to do some work adds to the potential wealth of the community(13). Furthermore, no degree of economic gain can measure the value to society in the transformation of an individual from a dependent to a productive, self-reliant person; but, by adequate rehabilitation, industry saves pensions, labor saves valuable men, government has more taxpayers, and our relief rolls are reduced. In the perilous times in which we live, confronted by a foe whose massed strength is superior to ours, American industry will have to rely more and more on the untapped sources of manpower which rehabilitation can furnish.

REHABILITATION AND CHRONIC ILLNESS

Today the United States is faced with a growing tide of chronic disease with its concomitant disability, which threatens our national life medically, socially, and economically. Paradoxically, much of this problem has been caused by medicine itself through the scientific advances made in reducing the incidence of death from infectious and communicable diseases, through a reduction in infant mortality, and through improved public health measures, thereby producing, as a direct result, an aging population which is more prone to such chronic diseases(14). An example of this is seen in the instance of New York State. In 1900, seven chronic diseases (cancer, diabetes, intracranial lesions of vascular origin, diseases of the heart, diseases of the arteries, cirrhosis of the liver, and acute and chronic nephritis) were responsible for 25.7 per cent of all the deaths in New York State. Between 1900 and 1940, when the population of New York State increased 85 per cent, and the total number of deaths increased by only 13 per cent, the number of deaths from chronic diseases increased by 200 per cent; it now includes over two thirds of all the deaths in the state. Another example is that, whereas diabetes ranked twenty-seventh and arteriosclerosis thirty-fourth as causes of death in 1900, they were eighth and tenth in 1944(15). Added to this death toll due to chronic disease is the fact that, whereas acute infectious disease usually results in rapid recovery or death, chronic illness may linger for years. Thus many of those who died from chronic disease may have been social and economic burdens for many years(16).

As chronic disease is usually non-reportable, reliable statistics as to its extent are difficult to find. Most currently used figures spring from the National Health Survey, from which the figure of 23,000,000 cases was derived. Later reports, based on smaller samplings, however, have indicated that chronic disease is even more prevalent. In a recent survey in New Haven, conducted by the School of Public Health of the Yale University College of Medicine, it was found that 121 persons for each 1,000 in the population suffered from chronic illness and that one third of this number were totally disabled(17).

Although these cases of chronic disease are more prevalent among the older portion of the population, public health surveys state that sixteen per cent of all persons with known chronic disease are under twenty-five years of age. For this reason, until specific cures for diseases of the heart and circulation, rheumatic fever, arthritis, cerebral palsy, multiple sclerosis, poliomyelitis, and other crippling diseases which attack the young as well as the old are found, techniques of physical rehabilitation, psychology, and social service must be utilized not only to teach the disabled to live within the limits of their disabilities but to the hilt of their capabilities. Many of these young people are capable of great achievements later in life which they would not otherwise be able to accomplish were it not for rehabilitation.

Another type of disabling disease, which affects those who are in the prime of life, is neurological disease. Each year many business and professional men are struck by it and crippled for life. Some idea of the extent of the problem may be obtained from the fact that the "stroke" is listed as the third major cause of death, ranking behind only heart disease and cancer. The majority of the persons who do sustain a stroke of apoplexy do not die during the initial stage; instead, they improve to a greater or lesser degree and often live a number of years despite their residual disabilities. Because of the numbers involved, an estimated 1,000,000 in the United States, as well as the severity of the disability, the problem of their care is one of great proportions. In the past, a feeling of hopelessness pervaded their outlook, but today rehabilitation can change that. Many aphasics and hemiplegics can be taught to talk and ambulate. Many paraplegics and paralytics can be returned to states of comfortable usefulness(18). In rehabilitating them to carry on activities of daily living, a bread-winner is frequently released to productive activity.

So far only disabilities which can be seen have been mentioned, but though the problems of the tuberculous, cardiac, arthritic, diabetic, and sufferers from all types of degenerative diseases may not be visible on the surface, they are present. There are thousands of persons who are disabled by medical conditions not readily discernible, but which are just as handicapping in terms of medical, physical, social, and economic effectiveness of the individual as are those who have the "wounds that show the scars." Such persons do not have the advantages of a sympathetic society which can see, and therefore understand, that their problems may be more acute than those of the average person. These people also must have the opportunity for rehabilitation if they are to learn to live as useful citizens — assets to their communities, not liabilities.

REHABILITATION AND GERIATRICS

As was previously stated, the advances in medicine have produced an aging population. Two thousand years ago, the average length of life was 25 years; at the turn of the century, 49; and today it is 67. In 1900, one person in 25 was 65 years of age or older; it is estimated that in 1980, the ratio will be one in ten(19). The chances are now 2 out of 3 that a young man starting his working life at the age of 18 will live to his retirement age of 65. A forty-five-year-old man today has 70 chances in 100 of reaching the age of 65, the chances for a 55-year-old man are 78 in 100(20). As these people become older, their medical needs change, and they require more medical service. In 1940, 26.5 per cent of the nation's population over age 45 required over half the nation's medical care. From these figures it is quite apparent that rehabilitation will have to play an important part in the care of the older segment of the population because this age group is so susceptible to chronic diseases.

For this reason, rehabilitation of the aged presents a challenge to all the members of the community as well as to the physician, if they wish to see that older individuals fill a useful place in the community. Because of age plus physical disability many of these individuals will be prevented from returning to competitive employment. The factors of self-care and the ability to do productive work while living in a hospital, their own home, or an adult institution must be stressed(21). Work must be provided to fill the vacuum caused in their lives by retirement. Occupational therapy can be utilized to a great extent. All in all, constructive rehabilitation has much to offer older people to help them carry out the normal activities of daily living. Therefore, the problems of chronic disease and the aging must be met by the creation and utilization of abilities, rather than the building of facilities.

THE FUTURE OF REHABILITATION

It would not be proper to conclude without some mention of the possibilities which rehabilitation offers for the future and of the vocation which it presents to those interested in the field of medicine. The field of rehabilitation is a new but fertile field for investigative research. Its possibilities, like its ramifications, are almost limitless. There are a number of community hospitals throughout the United States which are interested in inaugurating rehabilitation programs, either independently or in conjunction with medical schools or with community agencies. These hospitals are in need of professional advice, assistance with administrative and operational procedures, and trained personnel. Present hospitals can be made into institutions of opportunity. "The average patient in the hospital suffers but ten per cent of the time and is bored to death the remaining ninety per cent of the time(22)." The hospital can take its place in the community with programs that aid the patient in re-orientation back to normal living. Small traveling clinics which could be operated by the State Vocational Rehabilitation program or the State Department of Health can be set up to operate much in the same manner as those which now function for cancer diagnosis and for crippled children. Centers requiring the services of occupational therapists, physical therapists, psychologists, social services workers, and a vocational advisor, could be established. Such large centers could be placed in large communities to function for the city and also for the rural population which surrounds the city.

In reviewing recent literature one sees the growing importance of the neurological and psychiatric aspects of rehabilitation, as well as the increasing employment of physical medicine and rehabilitation in the management of paraplegia, cerebral palsy, amputations, and tuberculosis. In view of recent articles there is indication of increasing use of rehabilitation and physical medicine in the fields of geriatrics, pediatrics, orthopedics, and rheumatology(23). All this points to the profound opportunities which rehabilitative medicine offers those interested in the welfare aspects of medicine. Doctors, nurses, social workers—all of them have their places in the future of rehabilitation.

SUMMARY AND CONCLUSIONS

1. Medical science, which in the past has been interested in the causation of disease, through its own advances, finds the emphasis shifting to the third phase of medical care; namely, rehabilitation.

2. The scope of rehabilitation is such as to make it everyone's business. The chief challenge will be in the field of the industrial handicapped and in the increased incidence of chronic disease.

3. Rehabilitation is a community responsibility and cannot be delegated to one particular group. It requires the co-operative effort of medicine and the ancillary services in health and welfare.

4. Just as atomic science provides a new field for vocational endeavor, so too the field of rehabilitation should provide a challenge to young people seeking their future careers.

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Psychosomatic Medicine—A New Approach*

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Doctor Barta further defines his concept of personality-types. These he classifies into four groups to each of which he applies a specific name. Recalling the recognized relationship between emotional reaction and somatic changes he attempts to show the possible effect of personality-type in determining the character of the somatic affection in each of 148 patients suffering from one of nine recognized organic diseases.

EDITOR

It is now well recognized that certain emotional reactions may precipitate somatic disease. There is, however, no general agreement as to the circumstances under which such psychosomatic illness may be anticipated. One of the most perplexing aspects of the problem is the determination of the basic temperament or personality of the person prone to develop a psychosomatic illness of a given type. This paper is an attempt to clarify this aspect of the problem.

An emotion is a movement of an appetite which moves as it does because the agent has a system of attitudes or beliefs which make the emotional reaction appropriate to him. Since each man's attitudes or beliefs are learned and are relatively persistent, it follows that he will react to a given situation in a predictable manner each time he encounters it. Given a practical means of determining the basic system of attitudes (temperament) of each individual, we then can determine who is prone to develop a disease precipitated by a specific emotion.

Many have observed a relationship between repressed hostility and hypertension. This paper outlines a method by which we may go a step farther and determine which of our citizens, by temperament, are prone to react with repressed hostility.

In an earlier publication, Barta(1) indicated an apparent correlation of personality-type and certain physical diseases, by means of an original concept of human temperament that he had developed. His theory of human temperament and mental illness was incompletely developed at that time. He has since delineated two additional basic types of temperament to account for a group formerly referred to as "Mixed Inordinates."

"The Moral Theory of Behavior"(2) now delineates four basic personality-types: Type I, The Dominant Hypordinate, formerly referred to simply as Hypordinate; Type II, The Submissive Hyperordinate, formerly referred to simply as Hyperordinate; Type III, The Submissive Hypordinate; Type IV, The Dominant Hyperordinate. Types III and IV include those individuals formerly referred to as Mixed Inordinate, or in some cases, Dissatisfied Hypordinate types.

The present delineation of four basic types makes it possible to demonstrate the close correlation of personality-type and the common psychoses and psychoneuroses described in Barta's monograph(3).

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Barta(4), in a recent publication, was also able to demonstrate that the response to sedative and stimulative drugs seemed to vary in different personality-types in a predictable manner.

The present paper is an attempt to show the correlation of personality-type with certain physical diseases by utilizing his four personality-types as now delineated.

BASIC TEMPERAMENT

Basic temperament is easily ascertained by Barta's method. Everyone, with few exceptions, is either dominant or submissive to some degree. Everyone is basically hypordinate or hyperordinate to some degree.

Those who rely on their own judgement and expect others to agree with them are dominant. Those who prefer to follow the advice of others and are strongly influenced by the demands of others are submissive. The compensatory dominance of submissive personalities and the reactive submission of dominant personalities encountered in certain emotional reactions will seldom cause confusion if the usual attitude of the patient, when free of significant emotional distress, is ascertained.

Those who are ordinarily pleased with their ability and think themselves quite capable are hypordinate. Those who are usually dissatisfied with their ability and think themselves to be inadequate are hyperordinate. Good rapport is usually necessary before mildly hyperordinate persons are able to admit their own poor opinion of their ability.

Determining the patient's basic dominance or submission, and his basic hypordinacy or hyperordinacy, immediately places him in one of the four basic groups:

Type I is the Dominant Hypordinate, who has been taught to abide by his own judgement and to be satisfied with his own ability without awareness of his objectively self-willed and self-satisfied attitude.

Type II is the Submissive Hyperordinate, who has been taught to abide by the judgement of others and to be dissatisfied with his own ability without awareness of his objectively passive and self-depreciatory attitude.

Type III is the Submissive Hypordinate, who has been taught to abide by the judgement of others and to be satisfied with his own ability without awareness of his objectively passive and self-satisfied attitude.

Type IV is the Dominant Hyperordinate, who has been taught to abide by his own judgement and to be dissatisfied with his own ability without awareness of his objectively self-willed and self-depreciatory attitude.

PSYCHOSOMATIC CORRELATION

In attempting to ascertain if there is a positive correlation of personality-type with common physical diseases, it seemed desirable to begin with diseases or afflictions of highest incidence in the population. Certain diseases of high general incidence were not commonly encountered by the author in his practice of psychiatry. Other conditions, e.g. the common cold, were so commonly encountered that no correlation with personality-type could be readily established. The author, therefore, decided to evaluate more carefully a number of conditions which he encountered more frequently in persons of certain personality-types while obtaining routine medical histories on his psychiatrc patients. These conditions were: peptic ulcer, hypertension, coronary occlusion, diabetes mellitus, allergy, carcinoma, rheumatoid arthritis, chronic anemia, fractures and other serious accidents.

The series of cases for each condition was quite small, varying from eight to twenty-three for each affliction. It is recognized that statistical data on so few patients is far from conclusive. However, it is because the psychiatrist has such limited access to patients who are physically ill that this preliminary report is offered. Physicians who encounter these conditions more frequently may be able to establish or refute the author's observations on the basis of much larger series of cases.

Table I illustrates the incidence of each physical disorder evaluated, in each of the four personality-types. The degree of correlation with specific personality-types is quite striking in this small series of cases. Certain data from the case histories seem to enhance this specificity:

In the fracture group the Dominant Hyperordinates (DR) who sustained fractures were pathologically depressed and discontent at the time of injury. Two of the Submissive Hypordinates (SO) were intoxicated at the time of injury. Only in the Dominant Hypordinates (DO) did the injury seem to be a logical result of the patient's typical "fools rush in where angels fear to tread" behavior pattern.

The Dominant Hypordinates with peptic ulcer had been chronically depressed for several years at the time their ulcers were confirmed by x-ray. The two Submissive Hypordinates had acute, bleeding ulcers which healed rapidly with proper treatment. Chronic peptic ulcer appeared to be highly characteristic of dominant hyperordinates only.

All cases of hypertension in Dominant Hyperordinates were mild, transitory, and unmarked by the progressive retinal and renal changes noted in so many of the submissive hypordinates. Dominant hypordinate hypertensives tended to sustain their elevated blood pressure at a moderate level, but showed few retinal signs of hypertension. Every case diagnosed as "malignant hypertension" by a competent medical consultant was in the submissive hypordinate group!

TABLE I

TEMPERAMENT	TYPE I DO (Parasympatheticotonic)		TYPE II SR (Orthosympatheticotonic)		TYPE III SO (Orthosympatheticoclonic)		TYPE IV DR (Parasympatheticoclonic)		
	No.	%	No.	%	No.	%	No.	%	Total No.
Peptic Ulcer	2	11.1	1	5.5	2	11.1	13	72.2	18
Hypertension	2	9.5	0	0	16	76	3	14.3	21
Coronary Occlusion	1	7.1	4	28.6	2	14.3	7	50	14
Diabetes Mellitus	3	27.2	0	0	8	72.8	0	0	11
Allergy	1	6.2	2	12.5	2	12.5	11	68.8	16
Malignancy	0	0	7	36.8	0	0	12	63.2	19
Rheumatoid Arthritis	1	12.5	0	0	7	87.5	0	0	8
Chronic Anemia	0	0	21	91	1	4.5	1	4.5	23
Fractures	10	55.5	2	11.1	3	16.6	3	16.6	18
Total No.	20		37		41		50		148

Mildly Dominant as well as definitely Submissive Hypordinates were encountered with diabetes mellitus, indicating that the disease is perhaps basically characteristic of hypordinacy. Submissive temperament seems to increase the tendency to this condition however.

The term "chronic anemia" should be explained. Some of these cases had been diagnosed as pernicious anemia by medical consultants.

Many, however, were patients with persistent anemia of moderate degree, in which the basis for the anemia was never established. Most of them had been treated "nonspecifically" with liver and iron preparations intermittently for long periods of time. A number of them had failed to respond to oral iron-medication and later did respond to parenteral concentrated liver extract while under my care.

INTERPRETATION

It would be premature to say much about the significance of these findings until they have been substantiated by others in a much larger series of cases. Certain general tentative conclusions may be permitted, however.

It seems that human behavior leaves its mark on the human body when this behavior persistently exceeds or falls short of the mean of objective rectitude. It appears that the chain of events leading to organic change is somewhat as follows:

From infancy we are taught to have certain attitudes toward ourselves and others which determine our usual manner of acting or reacting (ie., basic temperament). These attitudes are, of course, modified to a considerable degree by the use of reason as it develops in the growing child. The patterns of reaction determined by our basic attitudes apparently modify or influence the action of the autonomic nervous system in a more or less specific way. The autonomic response associated with a given behavior pattern, in turn, seems to modify the action of our endocrine system and other organ systems in a specific manner which ultimately leads to organic change of a predictable type.

Barta(4) has previously indicated the apparent autonomic nervous system "balance" of his four types of human temperament. Dominance or hypordinacy seems to engender parasympathetic augmentory and orthosympathetic inhibitory responses, and submission or hyperordinacy seem to engender orthosympathetic augmentary and parasympathetic inhibitory responses. The Dominant Hypordinate (Type I) seems to be a tonic parasympathetic type of moderate degree, and the Submissive Hyperordinate (Type II) seems to be a tonic orthosympathetic type of moderate degree. The Submissive Hypordinate (Type III) seems to be a clonic orthosympathetic type of strong degree, and the Dominant Hyperordinate (Type IV) seems to be a clonic parasympathetic type of strong degree.

Evaluation of Table I thus indicates that periodic, strong parasympathetic discharge (DR) bears a positive correlation with peptic ulcer, coronary occlusion, allergy, and malignancy. Persistent parasympathetic discharge (DO) of moderate degree, on the other hand, bears a high correlation only with fractures, and a slight correlation with diabetes mellitus. Periodic, strong orthosympathetic discharge (SO) bears a positive correlation with hypertension, diabetes mellitus and rheumatoid arthritis. Persistent orthosympathetic discharge (SR) of moderate degree, on the other hand, bears a high correlation with only the chronic anemias, and a slight correlation with coronary occlusion and malignancy.

Why a patient develops one rather than another of the afflictions to which he is seemingly prone by temperament is not easily explained. For example, I am unable to explain why some Dominant Hyperordinates develop peptic ulcer, rather than allergy, malignancy or coronary occlusion. The particular disorder which develops in a given individual of a type prone to several disorders may be due to a constitutional organ-system predisposition, the relative weight of the two qualities of temperament involved, the particular form of environmental stress involved, or to some "X" factor which is as yet unrecognized.

The absolute correlation of malignancy with hyperordinacy in the author's small series is particularly interesting. The attempts of others to evaluate the possible psychosomatic factors associated with malignancy have been few and fruitless to date. Even if my correlation proved to be much less specific in a larger series of cases a new approach to the etiology of malignancy would be apparent.

The "moderation in all things" identified with good mental adjustment is readily recognized as a real safeguard of physical as well as mental health. However, as the "Moral Theory of Behavior" demonstrates, many persons think they are being "moderate" when they are actually exceeding or falling short of the objective mean. It is only by distinguishing the involuntary deviations associated with human error from the voluntary deviations, which are vice, that we can hope to reeducate the maladjusted!

SUMMARY

A recent theory of temperament and mental illness is in part described by its author.

The relationship of certain physical diseases to the four types of temperament described by the author is demonstrated.

CONCLUSION

There is an apparent positive correlation of certain physical diseases with specific qualities of temperament as delineated by the author.

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Sugar is often added to milk in making infants' formulas. It is easily assimilated and available for energy quicker than any other common food.

Direct contact with patient families, sometimes as early as the first year of medical school, is helping make better family doctors of today's medical students.

In a special 45-page symposium in the July issue of The Journal of Medical Education, nine experts discuss the value of the family care program in the education of the physician. Dr. James M. Faulkner, dean of Boston University School of Medicine, is editor of the special section.

Dr. David P. Barr, professor of medicine at Cornell, outlines some of the objectives of a home care program in an introductory section. He says, "It deals with the life situation of patients outside of diseases as well as behavior and attitude to illness. It stresses the importance of convalescence, rehabilitation, the preservation of health and the prevention of subsequent illness."

A detailed outline is given of outstanding home care programs in operation at 11 medical schools, most of which utilize home visits as a method of acquainting students with the total medical problem. Other activities include interviews with members of the patient's family, conferences with social workers and visiting nurses and contacts with community agencies. This method of learning about comprehensive medical care helps students realize that the problems of many patients cannot be handled by any one person, but require the whole community team.

Special topics considered by symposium members include: general practitioner supervision, prolonged illness, integration of psychiatry, observation of the family in the home, disease prevention and health service, comprehensive medical care, medical care, student participation and supervision.

Preventive Care of Infants and Children*

III. The Influence of "Guided Growth" on Feeding and Sleeping Patterns of Infants—Physiological and Psychological Background

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INTRODUCTION

There is need for a better understanding of the normal infant so that better emotional, intellectual, and physical growth may be obtained. This fact is rapidly being accepted. The response to this need is evidenced by the tremendous impetus given to the study of growth and development in the infant, the child, and the adolescent. The works of Aldrick, Gesell, Johnston, Wetzel, and others have done much to further the understanding of these various processes. The early postnatal family interview, as described by Tompkins(1), is an attempt to get available understandings into the minds of the people constituting the infant's earliest environment. The feeding and sleeping patterns of infants are dependent on these fundamental growth and development processes.

It is proposed to set forth some observations on these habits in a series of papers. These observations are on basic physiological and psychological concepts, as they relate themselves to the eating and sleeping patterns of infants. Eating and sleeping are interrelated physiologically and psychologically. It will be pointed out that an understanding of these processes makes it possible to guide an infant, as growth progresses, to assure better emotional, intellectual, and physical development.

The present series of papers is designed to point out the advantages and disadvantages of both the rigid type of feeding schedule and the "free-wheeling" school of thought. There will be an explanation of a middle-of-the-road type of handling of the infant which we believe possesses all of the advantages of the two extremes. Mainly, these advantages consist of conformity to certain patterns on the one hand and more complete and unihibited unfolding of the individual on the other. The presented regime of infant care is based on certain fundamental physiological and psychological functions which vary with each individual child. The technic for determining these basic patterns will be described.

PREMISE

From the works of Aldrich and Gesell comes the knowledge that infants grow and develop as the result of certain internal instincts and growth drives. The feeding and sleeping habits of infants stem from these fundamental processes.

Previous methods of handling infants have been numerous. There is the regimentation method which fits the infant into certain preconceived plans and leaves out individualization. Furthermore, this regimentation does not consider the basic physiological mechanisms which each infant possesses. The self-regulatory schedule is a misnomer as it implies that a newborn infant is capable of establishing his own schedule and making the necessary changes without assistance. The self-demand-regime carries the implication that the infant is a dominating, demanding individual, which, in a sense, he is. These demands, however, in the newborn period are always reality-based and reasonable. They are based on fundamental basic needs. Even in his demanding, he is only attempting to conform to reality. The so-called demand-feeding will miss its intended mark if used by physicians and parents who do not understand how to meet the infant's needs ("demands"). These needs can be met through well understood physiological and psychological mechanisms.

To set forth a regime which avoids the above implications and disadvantages, the name "Guided Growth" will be used throughout this series of papers. The concept of "Guided Growth" is premised first on the idea that physiodynamic and psychodynamic functions must be understood, interrelated and specifically applied to the infant at hand. In short, we believe that many of the problems of psychosomatic medicine have their origin in the cradle.

Secondly, "Guided Growth" must interpret the needs of the infant in the light of cues. This interpretation is to be discussed in a forthcoming paper.

Finally, the needs made evident by these cues must be met by the necessary adult guidance which helps assure more complete intellectual, emotional and physical growth.

BASIC PHYSIOLOGICAL FUNCTIONS

It is pointed out that eating and sleeping are dependent, from a physiological standpoint, on the emptying time of the stomach, certain inherent reflexes, the hunger-satiety sequence, the influence of growth, and changes in the ability to eat foods of different consistency.

Emptying Time of the Stomach—The duration of time for evacuating the stomach is roughly constant if a given type of food is used and if the stomach is filled to capacity. The pattern of most full-term infants is approximately four hours. The emptying time is determined by the size and toughness of the curd, according to Brenneman(2), and by the buffer-capacity of the milk, according to Marriott(3).

Inherent Reflexes—Aldrich(4) states the infant is endowed with certain reflexes which are designed to help him be a successful feeder: (1) The Rooting Reflex aids the infant in obtaining his source of food; (2) the Sucking Reflex is automatic and related to hunger contractions; and, (3) the Swallowing Reflex conveys the milk to the stomach. The milk must first flow from the front of the mouth to the pharynx, usually without the assistance of the tongue. (4) The Satiety-Mechanism, in general, brings to a close the act of eating—especially in the newborn period. There are probably other mechanisms dependent on blood sugar changes and other body chemical changes which help determine the Satiety-Mechanism.

Hunger-Satiety Sequence — Close observance of the infant will indicate when the child is hungry, what foods should be offered both as to type and consistency, and when the stomach has been filled to approximate capacity. The following explanation is a brief summary of a very intricate process: (1) Vigorous stomach contractions which result in pain and unpleasantness are the basis of hunger; (2) any form of nutrient which touches the side of the stomach will result in decreased contractions, thus relieving the unpleasant feeling; (3) food is followed by decreased pain resulting in a decreased appetite and a pleasant feeling; (4) appetite is cultivated by pleasant experiences resulting from food; and, (5) almost any substance, either food or air, which is introduced into the stomach and which fills it to approximate capacity produces temporary comfort.

Influence of Growth—The rate of growth causes a child's caloric needs to increase or decrease. His food intake will vary accordingly. This function is very apparent in the appetite differences between a six-month-old infant and an eighteen-month-old child. Similarly, there is a marked increase in desire for foods during the adolescent years.

Changes in Ability to Eat Foods — As a child grows and develops normally, he develops the ability to handle foods of different consistencies. In the newborn-period, the tongue is not able to carry foods—especially solids—from the front of the mouth to the back. At first, the protecting tongue thrusts out these solids. When neuromuscular control of the tongue is established through further growth and development, the active conveyance of foods to the back of the throat is possible. Swallowing becomes much easier at this point. Now the infant is able to take pureed foods regardless of his chronological age. When the infant begins to make chewing motions, with or without teeth, he is able to handle foods of a greater consistency.

Inter-relationship of Eating and Sleeping—Everyone is aware of how difficult it is to keep awake after eating a heavy meal; so it is with the infant. Food in sufficient quantity causes a relative shift of blood to the gastrointestinal tract, including blood from the central nervous system, as an inducement for the infant to sleep. In fact, an infant filled to capacity has a difficult time keeping awake providing that all of his needs have been met and that he has been placed in his crib and left alone. Adequate stimulation of the infant can overcome this tendency to sleep. If the schedule is set up to fulfill the basic physiological mechanisms, his eating and sleeping needs will be met simultaneously.

Factors Influencing Basic Physiological Functions — These inherent physiological functions possessed by each infant are subject to the influence of certain factors. These factors may be introduced by the person in charge of the feeding of the infant.

Feeding Technic and Quantity of Food—If the infant is allowed to fill himself to capacity with a given substance, the emptying time of the stomach will be relatively constant. However, by improper technic, the stomach will not be filled to capacity, and the emptying time of the stomach will be shortened. Proper feeding accomplishes certain aims, as shown by the x-ray studies of normal infants(5). (1) It fills the infant to capacity with food. (2) It helps prevent colic. (3) It helps prevent the infant from spitting up or vomiting. (4) It establishes a regular feeding interval.

Quality of Food — The quality of food, as well as the quantity, is important in regulating the emptying time of the stomach. Water, orange juice, and milk-flavored water will be eliminated from the stomach sooner than a formula. A dilute formula will be eliminated from the stomach sooner than will a concentrated or rich formula. Breast milk or cow's milk of a given caloric value may cause variation in the emptying time of the stomach(6, 7, 8, 9). Though there may be a variation in the emptying time, for practical purposes foods of a given caloric value have satiety-values assuring, roughly, the same feeding interval even though interchanged.

Sweating — Sweating causes the elimination of water from the body. This loss of water leads to dehydration of the pharynx with resulting thirst. Thirst itself may awaken an infant, whether or not the stomach is empty. Satisfaction of thirst by water or orange juice essentially results in a diluted feeding. The diluted feeding introduces another variable into the feeding interval. An infant who is getting a sufficient quantity of approximately 20-calorie-per-ounce formula, or of breast milk, does not become thirsty between feedings unless he is over dressed or the external temperature is extreme. This infant desires little, if any, water as such.

Alterations in Hunger-Satiety Sequence—If the hunger-satiety sequence—as indicated by crying—is not satisfied, the prolonged crying of the infant results in a twofold effect(5). The stomach becomes partially filled with air, resulting in a decreased capacity for milk. Through this prolonged effort, the infant himself becomes exhausted and is not able to feed properly or completely. The fatigue makes him prone to fall asleep before completely filled at the feeding time. The intestinal tract also becomes filled with air, predisposing to colic in susceptible infants, or to a shortened feeding interval which makes the infant go off his own schedule.

If the hunger-satiety sequence is not observed, as indicated by the infants being awake and indicating hunger, the resultant may be one of two effects on the feeding. (1) If the baby is awakened from a sleep to maintain a schedule he may take a shortened feeding and not completely fill the stomach. This results in irregular feeding. Or, (2) when awakened, coercion may be used in getting the infant to take food. The result is an unpleasant experience related to feeding. This unpleasant experience may teach the infant to dislike certain foods, and eating is no longer a pleasure. Thus, it may be just as psychically traumatizing to feed infants too often as too infrequently. An axiom may be stated: Well babies should always be fed when they are hungry but should never be fed when not hungry. The eating and sleeping patterns are physiologically related and set up according to basic intrinsic mechanisms in each individual baby. If the baby is filled to capacity at each feeding, the patterning takes place in a predictable and pleasurable manner, according to basic needs.

The newborn sleeps constantly except when in pain. His sensory nervous system is as yet underdeveloped so that external stimuli, except in the extreme, seldom produce pain sufficient to disturb sleep. This is not true of internal stimuli such as the pain due to hunger contractions produced by an empty stomach. The feeding and sleeping interval, then, is the same during the early newborn period. Soon the sleeping interval shortens; in other words, the infant awakens because he is through sleeping rather than because he is hungry. Also, as time goes on, growth increases the stomach capacity so that, if filling at feeding time is complete, the feeding interval will gradually lengthen. The difference between the gradually lengthening feeding interval and gradually shortening sleeping interval is a physiological wakeful period. The physiological sequence then is (1) the sleeping interval followed by (2) a wakeful period until hunger is expressed, then (3) a meal followed again by sleep. If the baby is fed at the end of point 2, rather than its beginning, sleep physiologically follows the feeding because (1) the hunger pain stops, (2) there is physiological fatigue, and (3) the stomach is filled to capacity with a resultant shift of blood away from the brain to the splanchnic area. Thus, as the number of feedings decreases so does the number of naps. This direct relationship perists throughout infancy. If the baby is fed at the beginning of point 2, sleep usually does not follow the feeding because (1) there is no fatigue, the infant having just awakened, and (2) the baby only partly fills the stomach because of lack of hunger so there results an inadequate shift of blood away from the brain to the soma. There is no adequate stimulus for sleep, so the baby ultimately may cry until exhaustion finally puts him to sleep a short time ahead of the next feeding. He will then be awakened by hunger contractions before the need for sleep ends. The short feedings and naps interfere with each other rather than supplement each other. The baby who sleeps poorly may have his needs misunderstood so that he may be fed at increasingly short intervals with continued disturbance of sleep. Another axiom may be stated: To feed a baby before he is hungry results in a reversal of the normal feeding sleeping cycle. This may result in (1) colic because of air passing from the stomach into the intestinal tract, (2) disturbed sleep with unhappy experiences related to being put into bed, and (3) feeding disturbances because of the displeasure of being fed before he is hungry.

All of this discomfort occurs in relation to his parents. The universe feels good or unpleasant, primarily because of the parents. These parents represent the two sexes. The type of experience equated with the respective parent may be transferred accordingly to the respective sexes in the world outside of the home. A comfortable, pleasant, loving relationship with the mother better sets the stage for such a relationship with the next woman he is to contact. Likewise, a good relationship with the father aids the child in relating himself to other men. This world needs many more people who can lovingly relate themselves to others. Part of the answer in making this possible goes back to the cradle in direct relationship to how well the parents, through the guidance of their physician, can meet the eating, sleeping, and playing needs of their babies.

Rigid, Fixed Schedules — Alterations of the hungry-satiety-sleep sequence usually follow if a rigid, fixed schedule is used. These alterations may have certain prolonged effects regarding the future behavior of this child. The infant must either submit to this treatment or fight back. The infant who is forced constantly to submit to such treatment is a victim of a pattern which, if continued in other developmental phases, may lead him to be an overconformist; or, he may constantly battle against waiting or being fed too soon as prescribed by the rigid schedule. Thus he may begin a pattern of being a fighter, which is a more healthy and protective response. This pattern of fighting may be evinced in a poorly motivated leader or in an antisocial individual. This infant will be poorly motivated because his outlook, of necessity, will be egocentric rather than altruistic. Due to this pattern the infant is not allowed to spontaneously develop his own individual characteristics and to conform to his own inherent patterns of behavior. Thus his need to fight may become an ego-sustaining technic. The egocentric individual needs to use other people to maintain his own ego. His security is based on competition with others and is dependent on being in a relatively superior position. The altruistic person is a giving person or, more precisely, a sharing individual because he has been shared with; that is, his needs have been met and he learns from experience that to share is to receive from others in return. Such a person uses his own potentials to express himself rather than to exploit other people. He has himself well in hand; he knows and accepts his own abilities and limitations. From early life his needs and built-in patterns have been met because his physiological and psychological mechanisms were understood. He is altruistic because he never has needed to be competitive with others and because others (his parents) have been helpful in meeting his needs. His competition or, more properly, his creative drives have been directed toward realizing his own potential rather than in competing with other people.

The advocates of the rigid, fixed schedules desire this method of handling infants because they feel an attempt is made to have the infant conform to certain patterns. This conformity from the child is sought in order to help him develop a sense of security and responsibility in an adult world. These qualities are desirable but from an emotional standpoint the manner of attainment is faulty.

DISCUSSION

There are certain physiological and psychological criteria which must be satisfied if proper feeding of an infant is to ensue. These criteria have been presented and discussed in this paper. By the proper application of these functions, it is possible to "guide" the infant's emotional growth according to his growth patterns and basic needs.

The regimentation, self-regulatory, or self-demand types of schedules may not clinically apply these basic functions. At times, these functions may be distorted under other types of handling. A subsequent paper in this series will show how these basic criteria can be used in a clinical manner by a set of "cues" which the baby presents to the observer. In short, it is possible for the baby to self-indicate feeding-sleeping-play intervals. His own schedule, then, may be used so that he will not need to demand or self-regulate, nor will there be any reason to regiment. He begins life comfortably conforming to his own intrinsic physiological mechanisms. He learns by experience that it feels good to conform to these basic constant laws (reality) of a great universe.

SUMMARY

1. Feeding of the infants should be based on physiological and psychological functions which are constantly interrelated.

2. These physiological functions are: the emptying time of the stomach; certain inherent body reflexes; the hunger-satiety sequence; the influence of growth changes in ability to eat foods; and, the interrelationship of eating and sleeping.

3. The physiological functions are subject to variation by the influence of feeding technic, of quantity and quality of food, and of sweating.

4. The psychological considerations are: crying as an indication of hunger; the hunger-satiety sequence; and, subsequent alterations in this sequence.

5. The rigid, fixed feeding schedule, and the "free-wheeling" or related schools of thought may produce emotional insecurity by ignoring these basic functions.

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DIODRAST TERMED CHOICE AGENT IN STUDYING FETAL PHYSIOLOGY

Amniography with 70 per cent solution of Diodrast as the contrast medium provides more valuable information on fetal physiology, without systemic reaction, than any other known method of examination, according to Dr. Eugene M. Savignac, Detroit, Michigan. He writes in Radiology (60:545, April 1953).

In a comprehensive paper on roentgen amniography, Dr. Savignac reports on the effectiveness of this technique in providing important information concerning the status of pregnancy. Fetal soft-tissue abnormalities, fetal gastrointestinal activity, fetal life or death, malformations in the lumen or walls of the uterus and placental implantation can be determined by this technique. At the same time maternal excretory urography is made possible. The knowledge obtained of certain conditions cannot be diagnosed clinically or by other radiographic means, he states.

A significant finding in the study of 10 pregnant women at Holy Cross Hospital in Detroit, he adds, is that amniography with 70 per cent Diodrast was harmless to mother and fetus and "did not seem to induce labor."

He describes the technique as a method of obstetrical diagnosis involving trascutaneous puncture of the uterus through the maternal abdominal wall to inject varying quantities of Diodrast into the amniotic cavity. The amount of Diodrast injected depends upon the quantity of amniotic fluid. In general clinical practice amniography is done in the last three months of pregnancy, although it has been used earlier experimentally, he notes.

The radiologist is able to detect gross abnormalities of fetal soft tissues appearing as negative shadows in the opaque amniotic fluid. Fetal sex might thus be detected before birth, Dr. Savignac says. Every live fetus swallows the injected Diodrast, which appears in its digestive tract, and failure of swallowing "presumably indicates fetal death."

The contrast agent is eliminated by the maternal urinary tract, providing an excretory urogram about three hours following uterine puncture, the author continues. In addition, placental implantation is shown "very definitely" at any stage of pregnancy and with any position or presentation of the fetus.

Disposition of the Ulcer in Surgery for Duodenal Ulcer*

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In the following article the author points out the diversity of opinions, among surgeons, as to the best type of operation to be selected for the treatment of duodenal ulcer, as well as to the disposition of the ulcer itself. He discusses the dangers and the difficulties inherent in direct surgical attack on the duodenum. Doctor Bancroft finally relates, in considerable detail, an operative procedure that he regards very favorably, and has used in several instances.

EDITOR

A review or attempted evaluation of the various operations for peptic ulcer is beyond the scope of the time allotted for this paper. However, since the mortality in surgery for duodenal ulcer is almost entirely dependent upon the management of the ulcer itself, a discussion of this phase of the problem may be worth while.

I know of no better way to instill life into a lagging surgical problem than to recommend some particular operation for peptic ulcer. Whether or not to operate, what operation to perform, and, how to do the operation, are questions which elicit entirely different answers from different surgeons. So, also, does the question of what is to be done about the ulcer itself.

The moment we consider peptic ulcer we find ourselves in the midst of the argument between the resectionists and the vagotomists, both of whom, I believe, have valid arguments. One can not adopt one method to the exclusion of all others.

George Crile, Jr.(1) believes that vagotomy with gastroenterostomy, done properly, affords as much protection against recurrent peptic ulcer as does the three-quarter gastric resection. The operation is safer and there are fewer "gastric cripples".

At the other extreme are Frank Lahey(2), O. H. Wangensteen(3) and others who believe the three-quarter resection of the stomach affords the best protection.

Between these extremes are those who complement the resection with vagotomy, such as Weinstein and Colp(4, 5), and who believe the combined procedure is the method of choice.

Obviously, if one elects to do a vagotomy and gastroenterostomy, no direct attack need be made on the ulcer, in the absence, of course, of active bleeding or perforation; but, if one elects to resect the stomach, he is then confronted with the question of what to do about the ulcer.

Lahey(2) is of the opinion that removal of the ulcer is essential, while Wangensteen(3) is equally convinced that removal of the ulcer is not necessary to cure the ulcer diathesis.

If we agree with Lahey and decide that a three-quarter resection with removal of the ulcer should be done, let us first consider that part of the duodeneum with which we are concerned. I can do no better than quote from Sir Heneage Ogilvie's(6) article in a recent Lancet.

> "It (the duodenum) is deeply placed and when diseased may present a guileless appearance that lures the surgeon on to a point from which neither advance nor retreat is possible. It is a hateful little tube but one that we must constantly attack and therefore should study as carefully as a wise general studies his enemies before battle.
>
> At one extreme is the duodenum that comes up on a stalk directly the surgeon opens the abdomen, so that when the stomach is lifted the pylorus projects two inches outside the towels. Such a duodenum is most often encountered in the approach to other organs; as he passes on to remove the gallbladder, appendix, or uterus, the surgeon wishes sadly that he was doing a gastrectomy on this patient before an audience of jealous colleagues. At the other extreme is the short duodenum very deeply placed in a subdiaphragmatic space of great depth overhung by rigid costal margins, viewed with difficulty between the blades of long retractors holding back fat-laden viscera, where it lies fixed to the posterior abdominal wall like a barnacle to a ship's bottom. It is this kind of duodenum that we find when our rivals are peering over our shoulders.
>
> "Surgeons have attributed leakage from the duodenal stump to excessive mobilisation and devascularisation of the duodenal walls. But this is usually caused by the reverse fault — inadequate mobilisation, leading to insufficient invagination with sutures that are too tightly passed through the wrong structures.
>
> "As surgeons we are called on to attack the first part of the duodenum for three indications; cancer of the stomach, gastric ulcer, and duodenal ulcer. In the first two conditions the duodenum is normal and the operation seldom easy; in the last it may be straight-forward, it may be difficult, it may even be impossible, and it is a wise surgeon who recognizes the impossible task before he undertakes it. Phyicists may argue what would happen if an irresistible force were to meet an immovable body; surgeons know that when an incomparable technician meets an insoluble problem, the insoluble problem wins."

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*Read before the Nebraska Chapter, American College of Surgeons, Hastings, Nebraska, February 11, 1953.

> "Many ingenious operations have been described for closing the duodenum at or just distal to an ulcer, for repairing holes that have been torn in attempting the impossible — in short, for getting out of those difficulties into which we should never have landed ourselves. Someone said that the best way to prevent milk from turning sour is to leave it in the cow; certainly the best way to deal with duodenal difficulties is not to seek them. When I fly the Atlantic I like a pilot who is not expert at getting out of flat spins or landing on icebergs.
>
> "To speak to surgeons about the details of duodenal dissection and closure would be like telling golfers about one's brassie shot at the 14th. We all have our methods and we are all sure that they are the best. I change mine at least twice a year, and continually congratulate myself that I have at last reached finality. I believe that duodenum should be invaginated only into duodenum, never into head of pancreas.
>
> "Lastly I should say that, just as God is on the side of the big battalions, so is he on the side of the surgeon who never does an unnecessarily difficult operation. Most of the difficulties connected with the surgery of the first part of the duodenum are due not to the fact that there has been repeated ulceration but to the activity of the ulcer at the time of operation . . we should never be lead, as I am afraid we are often led, into operating on a patient with an active peptic ulcer if we can possibly avoid it; but by a period of careful medical treatment, of which rest in bed is the most important constituent, we should ensure that when we operate we are operating on the site of an ulcer rather than on an ulcer, and that our difficulties are those of avascular scar tissue rather than of the oedema and hyperaemia of active inflammation."

If we find ourselves confronted with a situation demanding definitive treatment of the active, indurated ulcer there are several alternatives at our disposal. We may do a simple gastroenterostomy in order to relieve the ulcer activity, and then follow it soon enough with resection so as to prevent a jejunal ulcer. We may do a Finsterer exclusion operation or we may, if we feel like that incomparable technician of whom Sir Ogilvie speaks, elect to remove the ulcer from the head of the pancreas and the common bile duct in order to have sufficient normal, flexible duodenal stump to safely invert. And then we can always surrender to the vagotomist and perform a vagotomy and gastroenterostomy.

A word about the variety of methods of value in the removal of an indurated duodenal ulcer adherent to the head of the pancreas and to the common bile duct is, perhaps, in order. Introduction of a T-tube into the common duct, with a long arm through the sphincter of Oddi into the duodenum, mobilization of the duodenum after the method of Kocher, and approach from below upward, has several advantages. It demarcates the level beyond which it is necessary to have sufficient duodenal stump for safe closure, and injury to the hepatic artery is less apt to occur. In fact, one does well to identify the location of the hepatic artery if he feels it may be involved in the dense scar tissue.

Another method is to transect the stomach in the prepyloric area and dissect the lower segment downward, thus opening the ulcer site. The edges of the duodenum may then be trimmed from the ulcer under direct vision.

This may be similarly accomplished, as recommended by Dr. A. A. Strauss, Michael Reese Hospital, Chicago, by placing the finger behind the duodenum and dividing first the anterior then the posterior wall distal to the ulcer. No clamps are used and the duodenum is not closed until the method of anastomosis has been decided upon.

Since the mortality occuring in subtotal gastrectomy is largely related to attempts at removal of the indurated ulcer with inadequate closure of the duodenal stump, it is apparent that the best way to deal with duodenal difficulties, as Sir Ogilvie stated, is not to seek them, but to choose a method which gives the indurated duodenum a wide berth.

Personally, I am of the Wangensteen school and am convinced that it is not necessary to remove the ulcer in order to cure the ulcer diathasis; and, since all surgeons agree that successful surgery is proportionate to the amount of stomach removed, I should like to direct attention to an operation recently revived and revised by Wangensteen. I refer to his article in the Journal of American Medical Association, May 3, 1952, entitled "Segmental Gastric Resection for Peptic Ulcer".

Basically, this operation consists of a long duodeno-antral slit with the preservation of the antrum but only a very small amount of the fundus (about ten percent). The rationale of the operation is that the antrum secretes very little acid, and the acid secreting fundus is removed. The long duodenal-antral slit provides an adequate pyloroplasty as well as a direct approach to the ulcer, if bleeding. This enables the small residual pouch to empty rapidly, but still, "dumping" is not as common a complaint as in the conventional Billroth II type of operation. The only contraindication to this procedure is, of course, an antral ulcer. I have performed this operation in three instances and, while it is too early to evaluate results, I was struck with the ease with which it was accomplished and the uneventful convalescence of the patients. A vagotomy was done in each instance but, as the simon-pure resectionists say, not for any desired physiological effect, but to facilitate mobilization of the fundus. In no instance was there any evidence of retention in the gastric pouch.

I am quite aware of the fact that the so-called effectuator area, the gastrin secreting antrum, remains; but, as Wangensteen points out, what does it matter if there is practically no responsive area to secrete acid? It would seem then since segmental resection as recommended here is not followed by recurrent ulcer, as proven by the failure of histamine in wax to provoke recurrence in dogs, and, since there is a lack of recurrence in Wangensteen's series, that it is separation of the antrum from the residual stomach that predisposes to recurrence.

In summary, then, I do not consider the removal of the duodenal ulcer necessary in resection for peptic ulcer; and I believe the segmental or sleeve type of resection to be a very satisfactory operation in the treatment of duodenal ulcer.

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Special Poliomyelitis Clinic

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In accord with action by the House of Delegates of the Nebraska State Medical Association, Jan. 11, 1953, the first of a proposed "series of clinics . . . to which all (poliomyelitis) patients regardless of age or financial status could be referred for examination" was held by the State Division of Services for Crippled Children. Doctor E. W. Hancock, Chief of this service, herewith relates details of the organization and consummation of this clinic. Doctor Hancock provides his evaluation of the results and offers comment on the probable help derived by the patients. He closes with recommendations that are worthy of study providing other similar clinics are to be planned and carried out.

EDITOR

I. HISTORY

During 1952, Nebraska experienced the worst Poliomyelitis epidemic in its history. The total number of reported cases was 2,254, constituting a rate of 17 per 100,000 for the state as a whole. Incidence in certain areas greatly exceeded this number with at least two counties attaining a rate of 200 or more, per 100,000.

The Poliomyelitis Coordinating Committee of Nebraska State Medical Association recommended that a series of clinics be set up for follow-up examination of these patients. It was recommended that these clinics be conducted by the State Division of Services for Crippled Children and that the National Foundation for Infantile Paralysis be requested to provide the necessary funds. This recommendation was presented to a special committee of the Nebraska State Medical Association House of Delegates and was approved. The State Board of Control, which is the official Crippled Children's agency, was requested to proceed with this program and agreed to do so. The Division, through Mr. Clinton E. Belknap, eastern Nebraska representative of the Foundation, applied for an allocation of $400 to cover the expense of an experimental clinic to determine the feasibility of such a program. The request was granted and the stated sum was sent to the Nebraska State Medical Association which was designated as the disbursing agent. The Division then proceeded to make plans for the clinic.

II. PRELIMINARY PROCEDURES

The first problem was the selection of an area in which to hold the clinic. It was finally decided that the area of greatest need was the northeast corner of the state. This area included 12 counties with a total of 300 reported cases. All of these counties had a high incidence, one of them, Dakota, being the highest in the state with a rate of 284 per 100,000. Among the considerations leading up to the choice of this area were:

the large number of cases reported; the absence of any treatment facilities in the area; the fact that most of the cases had been hospitalized outside the state so that no reports were available.

The second problem was regarding admission—policies. It was decided to accept all persons who had been diagnosed as having polio in 1952, regardless of age or economic status. A letter was sent to each doctor in the area requesting him to refer his patients and explaining the procedure and policies of the clinic; and the eastern Nebraska representative of the National Foundation was requested to write to each patient, inviting him to attend the clinic.

It was decided to hold the clinic at the city of Wayne, which is located almost exactly in the geographical center of the area. Wayne has an excellent small hospital which was placed at our disposal by its owner, Dr. Walter Benthack. Immediately across the street from the hospital is the Wayne City Auditorium which could be used for registration and waiting room. The responsibility for setting up the clinic was given to Miss Wilhelmina C. Ihrig, Orthopedic Field Nurse of the Crippled Children's Division.

In addition to the letters to patients and to doctors, the widest possible publicity was given to the clinic. Local and state-wide newspaper releases were prepared by Mr. Belknap and approved by the Director of Services for Crippled Children for publication. Announcements were made over local radio stations and news items about the clinic were carried by most of the radio stations with state-wide coverage.

III. PERSONNEL

Since this was not to be an appointment clinic there was no way of predicting the attendance; it was decided, however, to prepare for approximately 100 patients. This prediction proved almost exactly correct, actual attendance being 98. Personnel necessary for this number was considered to be as follows:

Professional:

Three orthopedists chosen from the staff of Crippled Children's Division because of their particular interest in the field of poliomyelitis.

Three registered physiotherapists, one from the staff of the Division, one from the Polio Rehabilitation center of Creighton Memorial St. Joseph's Hospital, one from the Orthopedic Hospital.

Two Public Health nurses, one from the staff of the Division and one former staff member who was familiar with the clinic procedures.

Three medical stenographers, two from our staff and one from the Rehabilitation Center. These stenographers were chosen because of their experience in transcribing medical information.

Non-Professional—

Recruitment of volunteer aids was made a responsibility of the Wayne County Chapter of the National Foundation under the direction of Mrs. Chris Tietgen.

The volunteer personnel included six professional nurses from the local area. Professional personnel not on the division staff or on the staff of the rehabilitation center were paid per diem fees and expense. Members of the staffs served without additional compensation but were reimbursed for actual expenses. Volunteers were not paid. It should be pointed out that if any future clinics of this kind are planned, provision should be made for compensating staff members, since this work is not included in the job for which they are being paid by the Division.

IV. CONDUCT OF THE CLINIC

The registration desk was set up at the Wayne City Auditorium with three volunteers acting as registrars. A minimal medical history was taken on a form which was provided. The patient was then conducted across the street to the clinic rooms where he first saw the orthopedist and the physiotherapist. The orthopedist, with the assistance of the physiotherapist, made a complete examination including the preparation of a muscle chart where necessary. The orthopedist then dictated his findings and recommendations to the medical secretary. Patients were then interviewed by the public health nurse for evaluation and determination of needs. When economic need was indicated, or a need for continued treatment was involved, the patient was interviewed by the medical social worker. Comments of all these individuals were recorded. Charts were then reviewed by the Diretcor of the Division of Services for Crippled Children and reports were sent to the doctor chosen by the patient. In this manner a total of 67 patients were interviewed by the medical social worker. The remainder were dismissed following an interview with the public health nurse.

V. EVALUATION OF RESULTS

The total attendance, as stated above, was 98. Out of the 300 known cases in the area this was considered to be a satisfactory number but it does not constitute a random sampling. The attendance by the counties was variable, and probably depended upon the amount of preliminary work done by the respective county chapters; for instance in Wayne county, where the clinic was held, almost every case attended. On the other hand, in Thurston county, where there were 25 known cases, only two attended. In all the publicity it had been pointed out that we did not wish to see those who were already under orthopedic care. In spite of this there were 23 patients in this category.

An attempt was made to divide the patients into four groups, as follows:

Group No. 1 including 27 patients, were those in which no residual was found.

Group No. 2, 46 patients, were those with minimal disability who were referred back to their own physicians for care.

Group No. 3, 23 patients, were those mentioned above as being already under orthopedic care.

Group No. 4, only 2 patients, were those considered to have severe disabilities which were not under care.

VI. COMMENT

It is difficult to determine the value of this type of procedure. The first group of 27 classified without disability no doubt received valuable reassurance. The third group, who were already under adequate care, were urged to continue their treatment and probably received additional incentive to do so, but the actual value to them also varied. The fourth group, the two who were in need of treatment, were, of course, greatly benefited. The second group, 46 in number, included a great variety of conditions from slight muscle tightness to paralysis of isolated muscle groups. These patients, as already stated, were urged to continue under the private care of their own physicians. They were instructed regarding exercises and other physiotherapeutic measures wherever it was deemed necessary. Whether they will actually carry out the recommended procedures depends largely upon the attitude of the patient and of the doctor, both of which are unpredictable. The value to these patients of a single observation is questionable. They undoubtedly need repeated observations for a considerable period. The children, of course, can be seen at the regular Crippled Children Clinics but there is no provision for the adults who constituted about one-fourth of the cases.

In summary, we would say that in terms of direct results the expense and work involved in this clinic could not well be justified, and that the intangible results which included education of the patients and their families, reassurance, an incentive to continue care, etc., are impossible to evaluate.

VII. RECOMMENDATIONS

We do not at this time recommend that further clinics of this kind be held. If any are held, they should involve a small area and should be preceded by a longer and more intensive preliminary work-up in the local area. It is quite possible that a clinic, held in one county or in two or three adjoining counties, preceded by at least two weeks of preliminary work-up by a public health nurse, and possibly a physiotherapist, would result in the discovery of more neglected cases. It is also possible that a work-up of this kind, followed by referrals of patients to already existing facilities would make the clinic unnecessary. These suggestions should be considered by the Poliomyelitis Coordinating Committee and by the medical advisory committee of the National Foundation.

From Statistical Bulletin, Metropolitan Life Insurance Co., Febr., 1953:

"In the circumstances, whatever success can be achieved in the control of respiratory cancer depends mainly upon continuing popular education in the symptoms of the disease and the promotion of measures for early detection and treatment. Periodic medical and x-ray examination of every person is the most productive means of detecting cases early. Since in practice it is almost impossible to attain this goal, it is vital that routine x-ray examination of the chest be practiced more widely, particularly among men over age 35 . . ."

Kountz, et al, Geriatrics, 8:63, Febr., 1953, writing on "Effects of Increased Protein Intake in Older People," state that "Our previous studies on nitrogen balance have indicated that many older persons fall into the category of debilitated individuals and may require a higher protein intake than the young. We were unable to maintain nitrogen equilibrium in subjects on diets containing .5 grams of protein per kilogram of body weight; in contrast it has been found that younger people may be maintained in equilibrium on such diets. Diets containing 1 gram or more of protein per kilogram of body weight per day . . . maintained nitrogen equilibrium . . ." Further studies, however, indicate that if the intake of protein is greater than 1.5 grams per kilo, per day, the food is not tolerated over an extended period.

Viruses As a Cause of Cancer

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One of the most perplexing features of the cancer problem lies in the possible etiological role of viruses. That these can play a part in the causation of cancer has long been known, and even longer suspected. Particularly Borrell, in a series of articles which appeared early in the century, insistently urged this view. Even experimental evidence to this effect was obtained early in cancer research devoted to etiology. The first experimental induction of cancer, sarcoma of the rat caused by intensive X irradiation, was announced in 1910 by Marie, Clunet and Raulot-Lalpointe. The following year saw the demonstration by Rous of the fact that a sarcoma of the domestic fowl could result from the injection of cell-free filtrate from a similar tumor. Other experimentally demonstrated causes, the now questioned production of gastric cancer in rats by infection with spiroptera, by Fibiger, and, of skin cancers by application of coal tar, were not announced until 1913 and 1915 respectively.

Since the first observation by Rous of a tumor-producing filtrate, a considerable number of tumors of fowls, of similar transmissibility, have been observed. Originally at least, the filtrates show marked specificity both as to host and tumor-type. While the first Rous tumor could originally be induced only in chickens of the same strain, after repeated transfers this specificity became, to some extent, lost. Finally the filtrate was effective even in (young) ducklings. Specificity of tumor type is better preserved, although this too can be modified by physical manipulation, and, to some extent, by host. Tumors of this character in fowls are not rare, some two hundred having been found. All are similar in transmissibility, but not in morphological character. Even artificially induced tumors frequently show the same transmissibility; McIntosh and Selbie, for instance, in four fowl sarcomas induced by coal tar, found two with the properties of the Rous tumor. Indeed, there is a possibility that all were associated with the presence of a filterable agent, since Murphy has shown that, even with agent present, neutralizing factors, removable by differential extraction, may render it inoperative. The same applies to tumors of fowls which occur in natural circumstances, since Duran-Reynals found the agent present in five of fourteen spontaneous tumors, with, of course, the possibility of the masking effect in the case of others.

A second tumor-inducing filtrate is that of the rabbit papillomatosis studied by Shope. From the lesions of this disease as it occurs in the cottontail rabbit, Shope secured a filterable virus which, when applied to the skin of domestic rabbits, produced papillomas which, with some frequency, became cancerous. Similar effects have been obtained with snowshoe and jackrabbits, while in the cottontail malignancy is quite rare. That transmission may occur in nature is indicated by the finding, although rarely, of virus induced cancers in rabbits other than cottontail. With this virus, as with that of Rous, the situation is complicated by the presence of neutralizing bodies; in this case, definite antibodies.

A third virus-induced cancer is that of the kidney of the pickerel frog, discovered by Lucke. This has not been studied as extensively as have been the Rous and Shope viruses.

In addition to the foregoing, there are a number of instances which, with relation to cancer, may be termed borderline cases. Among these is a virus-induced fibroma of the rabbit, studied by Shope, with immunological relations to infectious myxomatosis of that animal; and a leukosis of fowls, also virus-induced. Also, there are a number of unsubstantiated claims of viruses as associated with or causing cancer, such as those of Gye and Gregory.

Of more obvious concern than the foregoing, as regards human cancer, is the "milk factor" of Bittner. The discovery of this factor derived from what Slye regarded as evidence of the hereditary transmission of cancerous predisposition. Slye regarded her results, as shown in large part by the occurence of breast cancers in mice, as indicating that predisposition indicated the action of a Mendelian recessive. These findings were not confirmed by results obtained at the Bar Harbor Laboratory, and as the result of a search for factors other than hereditary, Bittner found conclusive evidence that the predisposing factor was transferred by milk; since young mice, if foster nursed, showed the incidence of breast cancer of the foster mother, providing the transfer was made very shortly after birth. Quite evidently the milk of cancer-stock mice contains an agent which, in the new (female) host will eventually, after the delay necessary for maturity, produce breast cancer. There is considerable evidence to support the idea that the agent acts in association with estrogen since, long before Bittner's work, Loeb had shown that early oophorectomy averted the development of breast cancers in susceptible mice.

It should be quite obvious from the foregoing that the three carcinogenic viruses which have been studied with any thoroughness, differ greatly in their mode of action, effects, and occurrence. The Rous viruses seem to be fairly frequent in malignancies of the fowl, indeed present the possibility that they are a constant feature of fowl sarcomas, even when these are artificially induced by other carcinogens. And since there appears to be no means of transmission naturally from one animal to another, the agent would with some probability seem to be a metabolic product, capable of inciting the changes that cause its production. Certain other features suggest the same conclusion, of metabolic derivation rather than parasitism. The Shope virus is in direct contrast with this; it occurs naturally in circumstances that indicate infectious transmission; it has not been observed in circumstances that would suggest widespread distribution; and it is definitely antigenic in character. The occurrence and transmission of the milk factor of Bittner suggests a parasitic character, although that conclusion cannot be definite. As regards its possible action relative to mouse-cancer in sites other than the breast, it has even been suggested that this milk factor, or another virus, is the primary agent in all cancers; and, that such carcinogens as the coal tar derivatives act only as predisposing factors. However, the more effective of the tar carcinogens can produce cancers in mice with almost absolute regularity. If the hypothesis stated above were true, it would indicate that the virus or viruses are ubiquitous in mice, an implication that seems inherently improbable unless one could assume that, as with the Rous viruses, they occur as metabolic derivatives.

There is, as yet, no definite evidence proving a relationship of viruses to human cancer. The nearest approach is the announcement by Gregory of the finding, under the electron microscope, of globoid virus-like bodies in 100% of human cancers, and their absence in non-malignant tumors. Hellwig reports somewhat similar results, but with the finding of similar, though smaller, bodies in benign lesions. Unlike Gregory, Hellwig regards these simply as globular proteins. Of the viruses which have been studied in detail, that of Rous would appear to have no possible relationship to human cancer. The Shope virus, with all the indications of an actively infectious agent, offers a close analogy to the virus which, in the human, causes the common wart; one is tempted to speculate whether, among the several races of man, there is one in which the wart virus would be carcinogenic. As regards the milk factor, it is at present impossible to say whether or not a similar agent plays a part in the genesis of human cancers; however, if such were the case, it would seem that breast cancers should show a more definitely familiar occurrence than is the case.

Notwithstanding the reductions in tuberculosis mortality, there is a sizable task ahead before the disease may be considered completely under control. This task would be facilitated if some community in which the disease is still a major problem undertook a project to show how this could be done most effectively under present conditions. The methods evolved should be capable of utilization widely, very much as the Framingham Demonstration set the pattern over 30 years ago. (Louis I. Dublin, A 40 Year Campaign Against Tuberculosis, Metropolitan Life Insurance Company, 1952.)

Tuberculosis is a completely unnecessary disease. It is a communicable disease caused by a specific micro-organism. Money spent on its control under the guidance of competent administrators is more than returned to the general economy through eliminating loss of production by those so protected and through converting tax dollar consumers into tax paying citizens. Although every person must die eventually of something, tuberculosis definitely is not included in that group of inevitable fatalities. Desirable though it is to spend money on research and control programs for heart disease and other non-communicable public health problems, it is poor economy to do so at the expense of tuberculosis control programs. Tuberculosis control, therefore should continue to receive individual support from appropriating bodies, public health administrators, and the general public. (James E. Perkins, M.D., Bulletin of the NTA, April, 1953.

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THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

1952 AMERICAL MEDICAL EDUCATIONAL FOUNDATION CAMPAIGN

The American Medical Educational Foundation was organized late in 1950 for the purpose of seeking contributions from the medical profession, state and local medical society.

Marked progress has been made by these organizations in an effort to meet the annual needs of the medical schools but there is still a wide gap to be bridged. The National Fund has distributed $2,819,901 in Class "A" and "B" grants. Each four-year medical school has received an average total of $37,500 and each two-year school an average of $17,500.

These grants, although small in comparison with the over-all operating budget of the medical schools has provided many schools with the largest unrestricted sums that have been available for many years.

The Foundation's 1952 campaign was conducted on a state and local level under the able leadership of Dr. L. D. McGuire and his several committees of busy physicians who were well aware of the financial plight of the nation's medical schools.

The figures for the 1952 campaign for the American Medical Educational Foundation have recently been released and you, the Nebraska "doctor" are to be congratulated for outstanding achievement.

A grand total of $49,146.25 was contributed by 474 doctors in the state. This amount placed Nebraska third in the nation, exceeded only by Indiana and New York. However, your average contribution was $103.68 as compared with Indiana's $49.78 and New York's $54.29.

A tremendous vote of thanks must also be given to the state chairman of the drive Dr. L. D. McGuire of Omaha. Doctor McGuire gave freely of his time and energy to make the state campaign a successful one and he has certainly done a most excellent job.

The total contribution of $906,533.82 is somewhat short of the $2,000,000 goal that the Foundation had hoped for but is an increase of 200 per cent over the previous year contributions of $291,478.68. This sharp increase in dollars and contributors over 1951 indicates that you, the doctors, are well aware of the growing needs of the nation's medical schools and that you intend to keep them financially free from government support.

You, the Nebraska "doctor," should feel proud of your excellent cooperation that you have given the American Medical Foundation Fund drive. The high contribution average indicates that you are vitally interested in Nebraska medical schools and other medical schools throughout the nation.

With thoughts of the immense medical school needs in the future, there is no doubt that the Nebraska doctor will make the 1953 campaign a bigger and better success than ever. You have shown a sincere desire to want medicine to progres and keep on progressing during the future years.

News and Views

THE NEW DRUG FORMULARY

The State Board of Control and Nebraska State Medical Association advisory committee met on July 27 to discuss the new formulary of the Nebraska State Medical Association. Mr. William Diers, Chairman of the State Board of Control, explained that it will provide laymen a means of knowing what drugs have been approved by state doctors. County assistance directors will not authorize any drugs not on the list for persons benefiting from assistance programs. The formulary lists only pharmaceutical formulae of drugs, not brand names.

According to Richard M. Jones, Director of the Blue Cross Commission, more than 44 million people are now enrolled in Blue Cross plans. Blue Shield Director, Frank E. Smith, reported that more than 25 million persons are enrolled in that plan.

On the state level, figures released indicate that the Blue Cross-Blue Shield paid benefits totaling $2,431,923.32 for the first six months of 1953. Of this amount Blue Cross paid claims of $1,418,465.25 to 21,458 members and Blue Shield paid claims of $1,013,458.07 to 34,849 members.

Nebraska Medical Service reports total earned income of $1,180,533.81 for the first half of 1953 and claims expense of $1,013,458.07, or 85.85% of income. Overhead costs amounted to $105,494.90, or 8.94% of earned income, Dr. Arthur J. Offerman, Omaha, President, reveals. June claims disbursements totaled $175,906.05, which represented 90.08% of income, for 5,983 services to members.

SPECIAL ASSISTANT TO MRS. HOBBY APPOINTED

Dr. Chester S. Keefer, prominent Boston physician, has been named Special Assistant (Health and Medical Affairs) to the Secretary of Health, Education, and Welfare, Mrs. Hobby. In this capacity, Doctor Keefer is charged with reviewing and advising the Secretary on all health medical programs of the department as well as on health and medical legislation.

The House and Senate have agreed on the amount of money to be granted to the Hill-Burton program. A total of 65 million dollars has been okayed for the construction for the fiscal year.

SPRINGDALE DIABETIC CAMP

A group of forty boys and girls enjoyed the opportunity of spending two weeks at Springdale Diabetic Camp at Nebraska City. Many types of recreation were offered as well as instructions as to the nature and control of diabetes. The cost of each guest was reduced through the cooperation of many groups and individuals. Some of the groups participating were, The West Central Diabetes Association, which initiated the camp program, The Diabetes Committee of the Nebraska State Medical Association volunteered its time and service. The University of Nebraska and Creighton Medical Schools, the University Home Economics Department have contributed the services of their personnel. Every child who applied for entrance to the camp was admitted.

The town of North Loup has a new clinic and a new doctor. These accomplishments have been possible because of the untiring efforts of a non-profit organization formed by the Lions Club of that town.

In order to get a doctor, a clinic had to be built. This was accomplished by selling shares of stock to everyone in the town and surrounding territory. The project was brought to a successful conclusion and Dr.

M. E. Markley was persuaded to come to North Loup. Doctor Markley was given a free hand in determining the design of the clinic. The low one-story building is now completed and is a beehive of activity from morning till night.

From the Omaha World-Herald:

A larger proportion of Nebraska doctors gave money to help medical schools last year than in any other state.

That was revealed in the recently published annual report of the American Medical Education Foundation. According to the report, 27.93 per cent of all physicians in the state, more than one of every four, contributed to the Foundation in 1952.

Other leading states, ranked according to the percentage of doctors contributing, were Indiana, South Dakota, Vermont, Wyoming, New Hampshire, Connecticut and Delaware.

The Foundation was set up two years ago by members of the profession to assist the nation's medical schools with money. During last year, 16 per cent of the nation's doctors gave more than three million dollars.

Individuals gave 291 thousand dollars to the Foundation. Other contributions brought the total to $906,533. In addition, physicians made direct gifts to medical schools totaling about $2,250,000.

From the McCook Gazette:

The newly elected President of the American Medical Association has said "although medical science has produced many drugs of near-miracle effectiveness in the last decade, I find that among the most potent of all medicines is still the human touch."

Here is one of the strongest of all the many arguments against socialized medicine or its variant, government dominated and directed medicine. Wherever these forms of medicine have been tried —and England is the best example for us Americans—the human touch has been largely destroyed. Neither doctor or pateint is any longer a free agent. The doctor must practice "by the book"—and the book is written and its rulings enforced by bureaucrats and politicians. The patient must also follow the book, and take whatever kind and quality of medical care the politicians in power decide he is to have, or do without. Doctors are overworked under some sort of a panel system, and the result is assembly line medicine. There is little time for providing that all-important human touch—even as there is little time for research and study. The loss in both human values and scientific values is beyond measurement.

The goal of American medicine is to keep the human touch, to continue to give us the best medical care on the face of the earth and to gradually solve the economic problems of illness. That is what is being done here under the free system.

The population of Nebraska state mental institutions increased by 107 in the first six months of this year. There were 6,536 inmates in five mental institutions on July 1st. The increase in mental institution population was partially offset by a drop in inmates at the Men's Reformatory and Penitentiary.

The new Lundberg Memorial Hospital in Creighton did a brisk business in its first 10 days of operation. The first baby girl and boy were born, also the first set of twins; the first surgical patient and the incubator was used for the first time. The institution was opened on July 6.

The new program of taking mental treatment to the people is beginning to pay dividends according to Dr. Cecil L. Wittson of Omaha. Doctor Wittson supervises the project which includes the Central Nebraska Mental Hygiene Clinic at Hastings, an eight-day-a-month clinic at St. Mary's Hospital in Scottsbluff and a traveling diagnostic clinic.

The program is a joint undertaking of the State Board of Control and the University of Nebraska, the emphasis being on reaching potential mental patients in an early stage, while they can still be cured. Outpatients are being treated for an average of $230 a case. Doctor Wittson said, "the program is being held back only by the lack of money and personnel."

The Saunders County Community Hospital is the first community hospital in Nebraska to have its own rehabilitation center for convalescent polio patients. The new department was financed by surplus funds from a recent drive to purchase a first aid truck, which was sponsored by the Wahoo Eagles. About $5,300 had been set aside for the truck and the group voted to sponsor the rehabilitation center with the surplus.

Operations of the center will be directed by Dr. Dwight Burney of Omaha, the actual treatment will be carried out by Hospital Administrator Paul Littrell. Treatment will be available to any convalescent polio patient in this area. The department has been set up to be recognized by the State polio headquarters and has received an unofficial okay from Eastern Nebraska Polio Director Clinton Belknap, according to Paul Littrell.

Special dedication ceremonies are being planned in the near future.

Here are some interesting statistical fact from the Statistical Bulletin of the Metropolitan Life Insurance Company:

UNITED STATES WAR LOSSES IN KOREA

More than 24,000 battle deaths have been reported by the armed forces since the beginning of hostilities on June 25, 1950. In addition about 9,000 are still on the list of the missing. The death rate averaged 3.5 per 1,000 in comparison with 8.9 per 1,000 during World War II. The heaviest losses were recorded during the second half of 1950 when the battle death rate was 7.9 per 1,000, this dropped to 3.2 in 1951, 1.3 in 1952, and 1.1 up to June of this year. The effective military medical services kept death rate from diseases below the 1 per cent mark.

RECENT CHANGES IN POLIOMYELITIS MORTALITY

In the past five years the average death rate from acute poliomyelitis was higher than that in any comparable period since the epidemic year 1916. A striking feature of the mortality from polio is the marked difference in trend by age. Death rate among white males for example from 5 to 9 years increased about one third from the 1930-1942 to 1948-1952 period, but at ages 10 to 14 it more than doubled, and at ages 25 to 44, rose to about six times the earlier rate. The death rate from polio also show marked geographic variations. In postwar years the highest death rates have generally been recorded west of the Mississippi and in the northern States west of the Ohio border. At the other extreme, there are 12 States in New England and the South in which the postwar rates are lower than or unchanged from the prewar years.

INCREASE IN MOTOR VEHICLE ACCIDENT FATALITIES

Last year approximately 38,000 motor vehicle deaths were recorded, this is an increase of about 6,000 over the number three years ago. If this rise continues, the total for 1953 may equal the all-time high of 40,000 fatalities recorded in 1941. The accident death rate increased from 13.6 to 16.9 per 100,000 between 1949 and 1952. Accidents in which passengers or drivers were killed increased more than 40 per cent between 1949 and 1952. Every age group under 65 years contributed to the over-all rise in the motor vehicle death rate. The largest increases occured in the ages 15 to 29, where more than 90 per cent of the vehicle deaths occur among passengers and drivers.

A group of Otoe County 4-H club members participated in the annual 4-H club health clinic in Syracuse on August 6.

According to Mrs. Louis Ehlers, chairman of the event, the youngsters were the healthiest group to go through the clinic in years. Some of the doctors participating were: Dr. C. J. Formanack, Syracuse; Dr. G. E. Burbridge and Dr. A. H. Bonebrake, Nebraska City; Dr. C. R. Williams, Syracuse; Dr. D. D. Stonecypher, Nebraska City, and Dr. Frans, Syracuse.

WOLBACH DOCTOR COMPLETES 48 YEARS OF MEDICAL PRACTICE

Dr. A. H. Holm, who will be 79 years old November 11 of this year, completed 48 years of the practice of medicine in Wolbach on July 8 of this year. When Dr. Holm was asked when he came to Wolbach, he simply answered, "I was here first." He came here with his parents to a farm in 1885. At that time they lived on the farm that is now occupied by the Frank Kolar family. In 1894 he and his older brother decided to farm on their own hook. This he explained didn't last very long as they dried out completely in '95. Turning his team of horses back to the mortgage holder he gave up farming. He began working for Bissell & Seavey, who were in the lumber business, in 1895. Along with working in the yard he cared for livestock that the concern had on the place now occupied by Gerald Perry. In '96 a little house had been built on the place and he was to spend full time caring for the livestock. That same year Spring Creek flooded, taking fences and corrals with it. His help was no longer needed as the stock was moved to a pasture elsewhere. He went to Richardson County in southeast Nebraska, where he worked on a bridge gang and on a farm for a few months. He returned to Wolbach in the fall of 1896 and started working in a store for Ed Wight.

In order to give an idea of times in that era, Dr. Holm remarked that he would start working at 6 in the morning and work until 10 at night and many times until 2 in the morning. His pay was $10.00 per month. He slept in the store. The doctor stated that you could buy a suit of clothes then for $5.00.

In 1899 he went to work for Dr. Welch in the drug store, where he worked until his entry in medical college. Dr. Holm entered Omaha Medical College in the year 1901. After the first year in school, the Omaha College became affiliated with the University of Nebraska, from which he graduated in 1905.

Dr. Holm opened his first practice, June 1, 1905, in Central City, where he remained one month. He had been told that Central City was a good location, as there were three doctors there and they were expected to quit. To quote Dr. Holm, "They didn't say when Gabriel was going to blow his horn."

He opened his first office in Wolbach, July 8, 1905 in an office room of the second floor of the Bissell & Seavey building. This building now houses the Gamble Store.

In 1914 Dr. Holm built the office building that he now occupies. This is a neat brick structure.

Dr. A. H. Holm married Mable Bissell in October of 1905.

During his time in Wolbach, Dr. Holm has served a total of 35 years on the Village Board. He served as chairman of the board many times during his terms of office. He has served six years on the Board of Education. His serving as a member of the Methodist Church Council would correspond with the number of years he has had his practice in Wolbach. He has served untiringly with all organizations in the city.

Announcements

NEBRASKA ACADEMY OF GENERAL PRACTICE

The Nebraska Academy of General Practice will hold a Scientific Meeting, September 3, in Fort Kearney Hotel, Kearney, Nebraska.

Registration will be 8:30-9:30 a.m. Address of Welcome by Frank J. Mnuk, President. Dr. A. C. Anderson will be presiding with the following as speakers: Dr. Lynn Thompson, Anesthesiologist, Omaha, Nebr., "Regional Block Anesthesia—Slides and Models;" Dr. C. W. McLaughlin, Surgeon, Omaha, Nebr., "Hand Injuries—Surgical Management;" Dr. John Hartigan, Internist, Omaha, Nebr., "Management of Hypertension—New Drugs;" Dr. Fred Webster, Orthopedist, Lincoln, Nebr., "Congenital Hips;" Dr. Paul D. Bruns, Ob. & Gyn., Denver, Colo., (Subject to be announced); Dr. D. C. Campbell, Hematologist, Rochester, Minn., "The Anemias;" Dr. D. E. Baca, General Practitioner, Papillion, Nebr., "Addison's Disease, Corticotropins and Corticoids;" After dinner speaker, Frank W. Mueller, Businessman, "Are You Telling Your Story"

All members of the Nebraska State Medical Association are invited. There will be a program for the ladies.

SOUTH DAKOTA'S ANNUAL REGISTRATION FEE

The South Dakota Board of Medical Examiners has announced the passage of legislation creating an annual registration fee for licensees in that state in the amount of $2.00, effective Jan. 1, 1954. If you are licensed in South Dakota and wish to maintain your license, contact the South Dakota Board of Medical Examiners, 300 First National Bank Building, Sioux Falls, S.D.

COLORADO HEART ASSOCIATION POSTGRADUATE CONFERENCE

The Colorado Heart Association, The University of Colorado School of Medicine, Fitzsimmons Army Hospital and the Colorado Department of Public Health are sponsoring a postgraduate conference in "Clinical Electrocardiography and Recent Advances in Cardiovascular Diseases," November 9-14, 1953, in Denver. Address either Edwin M. Goyette, Col., M.C., Fitzsimmons Army Hospital, or The Colorado Heart Association, 314 14th Street, Denver.

AMERICAN COLLEGE OF SURGEONS ANNUAL CLINICAL CONGRESS

The 39th Annual Clinical Congress of the A.C.S. will be held in Chicago, Oct. 5 to 9, 1953, with headquarters at the Conrad Hilton Hotel. Postgraduate courses, forums, symposia, panel discussions, color television, medical motion pictures, and other important features will be presented. Contact the American College of Surgeons, 40 East Erie Street, Chicago 11, for further details.

PAN AMERICAN MEDICAL WOMEN'S ALLIANCE IV CONGRESS

The Pan American Women's Alliance will hold its fourth congress at the Beekman Towers Hotel, New York City, Sept. 24 through Oct. 1, 1953. For further information write Dr. Ina A. Marsh, 140 Linwood Avenue, Buffalo 9, New York.

AMERICAN COLLEGE OF CHEST PHYSICIANS ANNUAL MEETING

The 20th Annual Meeting of the American College of Chest Physicians will be held in San Francisco, California, June 17-20, 1954. Physicians interested in presenting scientific papers on any phase in the diagnosis and treatment of heart and lung disease should send a 100-word abstract, not later than January 1, 1954, to Dr. Edgar Mayer, Chairman of the Committee on Scientific Program, 850 Fifth Avenue, New York 21, New York.

MISSISSIPPI VALLEY MEDICAL SOCIETY ANNUAL MEETING

The 18th Annual Meeting of the Mississippi Valley Medical Society, to be held at the Elks Club, Springfield, Ill., Sept. 23-25, 1953, will be geared to the general practitioner and will feature 41 widely known speakers from 8 universities who will present symposia, panel discussions, clinico-pathologic conferences, and other interesting features. Contact Harold Swanberg, M.D., Secretary, W.C.U. Building, Quincy, Ill., for details.

AMERICAN MEDICAL WRITERS ASSOCIATION WILL MEET

This meeting will be held at the Elks Club in Springfield, Ill., on Sept. 23, 1953, during the meeting of the Mississippi Valley M. S. Symposia and papers by widely known American and British writers will be presented. For details contact Harold Swanberg, M.D., Secretary, W.C.U. Building, Quincy, Ill.

PRIZE ESSAY ON CARDIAC SURGERY

The Caleb Fiske Prize of the Rhode Island Medical Society will be awarded, this year, for the best dissertation on "Recent Advances in Cardiac Surgery." Write for complete information to Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence, R.I.

AMERICAN HEART ASSOCIATION 1954 MEETINGS

Annual meeting in 1954 will be held at the Conrad Hilton Hotel, Chicago, April 1 and 2. It will consist of Assembly Panels and General Assembly. It will be followed by—

Section on Clinical Cardiology to be held at the same hotel on the two succeeding days, April 3 and 4. Open to all members of the medical profession.

Annual Scientific Sessions for 1954 will not be held at the usual time but will follow the International Congress on Cardiology on Sept. 16 through the 19th, in Washington, D.C. Contact Dr. Charles D. Marple, Medical Director, American Heart Association, Inc., 44 East 23rd Street, New York 10, N.Y., for further details.

MISSISSIPPI VALLEY TUBERCULOSIS MEETING

Leading authorities from this country and abroad will appear on the program of the Mississippi Valley Trudeau Society and the Mississippi Valley Conference which will meet October 15, 16 and 17, at the Nicollet Hotel, Minneapolis, Minn. For more detailed information write Marguerite Breen, Chairman, Publicity Committee Mississippi Valley Conference on Tuberculosis, 614 Portland Ave., St. Paul 2, Minn.

KANSAS CITY SOUTHWEST FALL CLINICAL CONFERENCE

The 31st Annual Fall Clinical Conference of the Kansas City Southwest Clinical Society will be held in Kansas City Sept. 28 through October 1. An imposing roster of guest speakers will present many interesting and timely subjects. Write the society at 3036 Gillham Road, Kansas City 8, Missouri, for additional details.

NEW AND NON-OFFICIAL REMEDIES FOR 1953, CHANGED

Prior to 1953 New and Nonofficial Remedies consisted of essentially two books in one. One section dealt with the actions, uses and dosages of various drugs while the other contained tests and standards for Council accepted drugs for which official standards were not available. The first was useful to the doctor and the second to pharmaceutical firms. Beginning with the present volume these are published separately, so that NNR deals only with information useful to the physician. This division has greatly improved an already valuable source of information by making it easier and simpler to find what one wants.

MEDICAL BOOKS AND JOURNALS NEEDED

The medical schools and hospitals of South Korea need medical textbooks and medical Journals. Any contributions by doctors will be gratefully received. Mail to: Alameda Medical Depot, 2155 Webster St., Alameda, Calif. Mark any shipment "Kormeded."

Israel is desperately in need of medical, scientific, and technical books. Any books dealing with medicine in any of its facets, dentistry, chemistry, biology, public health, and veterinary medicine, published since 1940, are acceptable. Ship to: Books for Israel, 115 King Street, New York 1, N.Y. (Note: Up to 70 pounds may be shipped by parcel post, at 8c for the first pound and 4c each additional pound, marked "Book Rate").

UNIVERSITY OF MINNESOTA WILL HOLD MEETING ON HEART AND VESSELS

Under the auspices of the Minnesota Heart Association, the University of Minnesota will present a Symposium on Cardiovascular Physiology and Surgery next September 14-16 in the Museum of Natural History Auditorium on the campus. A "host" of internationally known physiologists and vascular surgeons will participate. Open to all physicians without tuition. Address Director, Department of Continuation Medical Education, Uni. of Minnesota Hospitals, Minneapolis 14.

CALL FOR PAPERS FOR STATE MEDICAL

Anyone who wishes to read a paper at the Annual Meeting of the Nebraska State Medical Association, May 10-13, 1954, should send his name and the title of his paper to R. B. Adams, M.D., 1315 Sharp Building, Lincoln 8, Nebraska. No request will be accepted after Jan. 1, 1954.

MID-CONTINENT PSYCHIATRISTS WILL MEET

The Mid-Continent Psychiatric Association, a district branch of the American Psychiatric Association, will meet in Kansas City, Sept. 26-27, at the Hotel President. In addition to local and district speakers, outstanding psychiatrists such as Kenneth E. Appel of Philadelphia, Daniel Blain of Washington, D.C., Lloyd J. Thompson of Winston-Salem, John R. Peters of Los Angeles, and Neville Murray of the University of Texas will be on the speaker list. Write G. Wilse Robinson, Jr., M.D., at 2625 West Paseo, Kansas City 8, Mo.

THE OMAHA MID-WEST CLINICAL SOCIETY

The Omaha Mid-West Clinical Society will present its Twenty-First Annual Assembly during the last week of October. An outstanding scientific program has been planned to meet the everyday needs of general practitioners and specialists alike. Since the first annual assembly of the Society, which was held in 1933, many changes and advances have been made in art and science of medicine, and through the intervening years the officers of the Society have so planned the programs that the latest in medical lore has been brought to the door of physicians in the midwest each year, thus providing them the opportunity of keeping up to date on current methods in diagnosis and treatment without the necessity of traveling great distances, with the attendant expense in both money and time.

The 1953 program promises to be on a par with all past programs. A portion of the Thursday afternoon and evening meetings will be devoted to an economic problem which has become a real threat to American Medicine, and all physicians should hear these discussions by one of the most able authorities on this subject in the United States.

With a view to saving further time for the busy physician, the assembly will close on Thursday evening, October 29th, at 10:00 p.m.

Make your plans now to attend the full four days of the Twenty-First Annual Assembly of the Omaha Mid-West Clinical Society, which will be held at Hotel Paxton, Omaha, Nebraska, October 26, 27, 28, 29, 1953.

The official program will be in the mail by October 12th.

THE OMAHA MID-WEST CLINICAL SOCIETY
TWENTY-FIRST ANNUAL ASSEMBLY
October 26, 27, 28, 29, 1953
Hotel Paxton, Omaha, Nebraska

PROGRAM

Monday Morning, October 26th

8:30 Registration.
10:00 Motion Picture.
11:15 Opening Remarks by Herbert H. Davis, President.
11:20 "Recent Advances in Nutrition of Importance to the Physician," Grace A. Goldsmith, New Orleans, Louisiana, Professor of Medicine and Director of Nutrition and Metabolic Clinic, Tulane University of Louisiana School of Medicine.
12:00 "The Role of the General Practitioner in the Detection of Some Important Eye Diseases," Michael J. Hogan, San Francisco, California, Clinical Professor of Ophthalmology and Director of the Francis I. Proctor Foundation, University of California Medical School.
12:40 Visit the Exhibits.
1:00 Buffet Luncheon. Discussion, "The Relation of Nutrition to Hypertension and Atherosclerosis." Leader, Grace A. Goldsmith.

Monday Afternoon

2:30 "Cancer of the Lung," John H. Gibbon, Jr., Philadelphia, Pennsylvania. Professor of Surgery, Jefferson Medical College of Philadelphia and Director of Surgical Research.
3:30 "External Eye Diseases," Michael J. Hogan.
4:30 "Differential Diagnoses of Anemias and New Methods of Therapy," Grace A. Goldsmith.
5:30 Visit the Exhibits.
6:15 Dinner. Discussion, "Problems in Cardiovascular Surgery." Leader, John H. Gibbon, Jr.

Monday Evening

8:15 "The Use and Abuse of Cortisone and Hydrocortisone in Ocular Diseases," Michael J. Hogan.
8:45 "The Management of Protein Deficiency Syndromes," Grace A. Goldsmith.
9:15 "Mitral Stenosis," John H. Gibbon, Jr.

Tuesday Morning, October 27th

8:30 Motion Picture.
9:00 "Skeletal Manifestations of Metabolic Diseases," J. Vernon Luck, Los Angeles, California, Associate Clinical

Professor of Orthopedic Surgery, University of Southern California School of Medicine.

9:40 "Cancer of the Esophagus and Gastric Cardia," John H. Gibbon, Jr.

10:20 "Principles of Potassium Metabolism," William S. Hoffman, Chicago, Illinois, Professorial Lecturer in Physiology, University of Illinois College of Medicine.

11:00 Visit the Exhibits.
"Emergencies During Operations," Chairman, John

11:15-12:50 Panel Discussions—

"EMERGENCIES DURING OPERATIONS," Chairman, John E. Courtney.
- "Complications in Anesthesia, Local and General; Agents for Peripheral Circulatory Collapse," Robert C. Therien.
- "Cardiac Arrest," J. Dewey Bisgard.
- "Unexpected Conditions Found at Operations," Earl A. Connolly.
- "Emergency Replacement of Vital Physiologic Fluids," Charles M. Wilhelmj.

"LOW BACK PAIN," Chairman, William L. Sucha.
- "Referred Low Back Pain," Eugene E. Simmons.
- "Posture and Anomalies," William R. Hamsa.
- "Acute Injuries," James W. Martin.
- "Indications for and Results of Disc Surgery and Spinal Fusion," Chester H. Waters, Jr.
- "Malingering," Robert D. Schrock.

"OBSTETRIC PROBLEMS," Chairman, Maurice E. Grier
- "Care of the Postpartum Cervix," William L. Rumbolz.
- "Viral Disease in Early Pregnancy," Michael Crofoot.
- "Management of the Pre-Eclamptic Patient," Ralph Luikart.
- "The Anemia of Pregnancy," John D. Hartigan.
- "Pregnancy Complicated by the Acute Abdomen," Stanley E. Potter, M.D.

1:00 Buffet Luncheon. Discussion, "Fractures." Leader, J. Vernon Luck.

Tuesday Afternoon

2:30 "Emotional and Mental Illness in General Practice," Francis J. Braceland, Hartford, Connecticut, Psychiatrist-in-Chief, Institute of Living Clinical Professor of Psychiatry, Yale University School of Medicine.

3:30 Presentation of Scientific Exhibit Awards, Francis L. Simonds, Chairman, Scientific Exhibits Committee.

3:35 "Diagnosis and Management of Clinical Dehydration," William S. Hoffman.

4:35 "Avascular Necrosis of Bone—Diagnosis, Pathogenesis and Therapy," J. Vernon Luck.

5:35 Visit the Exhibits.

6:15 Dinner. Discussion, 'Psychologic Responses to Steroid Administration." Leader, Francis J. Braceland.

Tuesday Evening

8:15 "Liver Function Tests in Diagnosis and Treatment of Hepatitis," William S. Hoffman.

8:45 "Pathogenesis and Management of Traumatic Arthritis," J. Vernon Luck.

9:15 "Men in Their Fifties," Francis J. Braceland.

Wednesday Morning, October 28th

8:30 Motion Picture.

9:00 "Congenital Anomalies of the Genital and Urinary Tracts," Oswald S. Lowsley, New York, New York, Director of Oswald Swinney Lowsley Foundation.

9:40 Middle Age, Menopause and Mental Disease," Francis J. Braceland.

10:20 "Diagnostic Problems in the Hydrocephalic Infant," Theodore Rasmussen, Chicago, Illinois, Professor of Neurological Surgery, The University of Chicago School of Medicine.

11:00 Visit the Exhibits.

11:15-12:50 Lectures.
- "Common Problems, Practical Helps and New Developments in Neurology," John A. Aita.
- "A Discussion of Continued Symptoms After Cholecystectomy," R. Russell Best.
- "Perineal Prostatectomy — Technique Illustrated by Three Dimensional Views," Edwin Davis, Sr., and Leroy W. Lee.
- "Startling New Developments in Psychiatry," J. Whitney Kelley.
- "Oral Therapy in Hay Fever," Ernest L. MacQuiddy.
- "Fungus Infections of the External Auditory Canal—Diagnosis and Treatment," Earl C. Montgomery.
- "Physical Diagnosis in Modern Medicine," Friedrich W. Niehaus.
- "Convulsions—Factures Affecting and Limiting Therapy," George E. Robertson.
- "Baby Business Is Big Business," Earl C. Sage.
- "The Chronic Draining Ear," Thomas T. Smith.
- "Colic and Infant Feeding," Charles A. Tompkins.
- "Problems in the Treatment of Common Dermatoses (Therapeutic Dermatitis)," Donald J. Wilson.

1:00 Buffet Luncheon. Discussion, "Ureteral Obstructions." Leader, Oswald S. Lowsley.

Wednesday Afternoon

2:30 "Recognition and Treatment of Pelvic Malignancy—A Clinic," Frank Raymond Smith, New York, New York, Associate Professor of Clinical Obstetrics and Gynecology, Cornell University Medical College.

3:30 "Cerebral Seizures — Diagnostic Implications, Medical and Surgical Treatment," Theodore Rasmussen.

4:30 "Renal Lesions with Particular Reference to Stone," Oswald S. Lowsley.

5:30 Visit the Exhibits.

6:15 Dinner. Discussion, "Pelvic Pain," Leader, Frank Raymond Smith.

Wednesday Evening

8:15 "Midline and Lateral Cervical Disc Protrusions," Theodore Rasmussen.

8:45 "Management of Carcinoma of the Prostate Gland," Oswald S. Lowsley.

9:15 "Menstrual Disturbances," Frank Raymond Smith.

Thursday Morning, October 29th

8:30 Motion Picture.

9:00 "Differential Diagnosis of Menopausal Syndrome," Lewis Marshall Hurxthal, Boston, Massachusetts, Head of the Department of Internal Medicine, Lahey Clinic.

9:40 "Cutaneous Manifestations of Virus Disease," Russell J. Blattner, Houston, Texas, Professor of Pediatrics and Chairman of the Department, Baylor University College of Medicine.

10:20 "Gynecologic Care of the Post Menopausal Patient," Frank Raymond Smith.

11:00 Visit the Exhibits.

11:15-12:50 Panel Discussions—

"CHILDHOOD MALIGNANCIES," Chairman, John R. Schenken.
- "Pathology," Harry W. McFadden, Jr.
- "General Surgery," John W. Gatewood.
- "Brain Tumors," J. Jay Keegan.
- "Tumors of Kidney and Adrenals," Thomas D. Boler.
- "Tumors of Bone," Werner P. Jensen.
- "Tumors of the Eye," Maynard M. Greenberg.
- "X-Ray Diagnosis," Ralph C. Moore.
- "Radiation Therapy," James F. Kelly, Jr.

"NEWER THERAPEUTIC AGENTS," Chairman, Arthur M. Greene.
- "Endocrine Therapy in the Female," Leo T. Heywood.
- "Radioactive Isotopes," Howard B. Hunt.
- "Adrenocortical Therapeutic Agents," Donald J. Bucholz.
- "Antibiotic and Chemotherapeutic Agents," Richard L. Egan.
- "Endocrine Therapy in the Male," Henry Kammandel.

"ABDOMINAL PAIN," Chairman, Edmond M. Walsh.
- "Abdominal Pain in Children," John M. Thomas.
- "Genito-Urinary Aspects," W. Joseph McMartin.
- "The Relation of the Female Pelvis to Abdominal Pain," John J. Freymann.
- "Surgical Aspects," George N. Johnson.
- "Medical Aspects," Clifford H. Hansen.

1:00 Buffet Luncheon. Discussion, "The Iodine Stained Vaginal Smear and Its Use in Office Practice." Leader, Lewis Marshall Hurxthal.

Thursday Afternoon

2:30 "Reticuloendotheliosis—A Clinic," Russell J. Blattner.

3:30 "Malpractice Claims and Suits Against Physicians," William F. Martin, LL.B., New York, New York, Counsel for the New York State Medical Society.

4:30 "Diagnosis and Treatment of Adrenal Disorders," Lewis Marshall Hurxthal.

5:30 Visit the Exhibits.

6:15 Dinner. Discussion, 'Poisoning by Household Items." Leader, Russell J. Blattner.

Thursday Evening

OMAHA-DOUGLAS COUNTY MEDICAL SOCIETY NIGHT

8:15 "Some Food for Thought," William F. Martin.

8:45 "Endocrine Problems in Adolescence," Lewis Marshall Hurxthal.

9:15 "Recent Advances in Treatment of Viral and Rickettsial Diseases," Russell J. Blattner.

10:00 Adjourn.

News from Our Medical Schools

TIME OF ORTHOPEDIC CLINIC CHANGED

Beginning August 10, 1953, orthopedic clinics at the University Hospital Dispensary will be held on Monday morning at eight o'clock instead of on Friday as heretofore.

NEW BOOKS ACQUIRED BY MEDICAL LIBRARY

The university of Nebraska College of Medicine Medical Library wishes to acquaint doctors with its recent book acquisitions. List No. 19, as of May, 1953, is printed below for your information:

Advances in Cancer Research. New York, Academic Press, 1953.

Beard, D. E.: Radiologic Diagnosis of the Lower Urinary Tract. Springfield, Ill., Thomas, 1952. (616.607 B38r).

Benedek, Therese: Psychosexual Functions in Women. New York, Ronald Press, 1952. (612.62 B43p).

Bernstine, J. B. and Rakoff, A. E.: Vaginal Infections, Infestations, and Discharges. New York, Blakiston, 1953. (618.15 B46v).

Bertalanffy, Ludwig von: Problems of Life. London, Watts, 1952. (574 B46p).

Brock, Samuel: Basis of Clinical Neurology. Baltimore, Williams & Wilkins, 3rd ed., 1953. (612.8 B78b3).

Brown, H. R.: Clinical Ballistocardiography. New York, MacMillan, 1952. (616.12 B81c).

Cecil, R. L.: The Specialties in General Practice. Philadelphia, Saunders, 1951. (616 C32s).

Cobb, Stanley: Foundations of Neuropsychiatry. Baltimore, Williams & Wilkins, 5th ed., 1952. (616.8 C63f5).

Collins, V. J.: Principles and Practices of Anesthesiology. Philadeiphia, Lea & Febiger, 1952. (615.781 C69p).

Daland, G. A.: Color Atlas of Morphologic Hematology; With a Guide to Clinical Interpretation. Cambridge, Harvard Univ. Press, 1951. (616.15 qD15c).

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Coming Medical Events

POSTGRADUATE COURSE IN ENDOCRINOLOGY, September 22, 23 and 24, 1953, University of Nebraska College of Medicine, Omaha, Nebraska. Elton Newman, M.D., University of Nebraska College of Medicine, 42nd and Dewey, Omaha, Nebraska.

NEBRASKA STATE MEDICAL ASSOCIATION REGIONAL POSTGRADUATE CIRCUIT COURSES—

September 28—Alliance
September 29—McCook
September 30—Hastings
October 1—Columbus
October 2—Wayne
October 3—Nebraska City

COLORADO STATE MEDICAL SOCIETY 83RD ANNUAL SESSION, September 29 - October 2, 1953, Denver, Colorado. Mr. Harvey Sethman, 835 Republic Building, Denver 2, Colorado.

OMAHA MID-WEST CLINICAL SOCIETY 21ST ANNUAL ASSEMBLY, October 26-30, 1953, Hotel Paxton, Omaha, Nebraska. Miss Irene Rau, 1036 Medical Arts Building, Omaha 2, Nebraska.

NEBRASKA STATE RADIOLOGICAL SOCIETY, October 21, 1953, Veterans Hospital, Lincoln, Nebraska.

NEBRASKA HEART ASSOCIATION - IOWA HEART ASSOCIATION FALL CLINICAL CONFERENCE, Omaha, Nebraska, November 7, 1953.

NEBRASKA HOSPITAL ASSOCIATION, November 12 and 13, Hotel Cornhusker, Lincoln, Nebraska.

CRIPPLED CHILDREN'S CLINICS—

September 12—Broken Bow, High School
September 26—Kearney, Good Samaritan Hospital
October 10—O'Neill, High School
October 24—Wayne, Benthack Hospital
November 7—Alliance, St. Joseph's Hospital
November 21—Ogallala, Elks Club

Nebraska State Department of Health

DISTRIBUTION AND USE OF GAMMA GLOBULIN*

AVAILABILITY

Wide publicity has been given the results of studies indicating that gamma globulin has some value as a prophylactic agent for paralytic poliomyelitis. Such publicity will undoubtedly result in an overwhelming demand for this material in the coming months.

The supply of gamma globulin is severely limited, it being estimated that the maximum amount available this summer will not exceed 10,000 liters.

The entire supply is, of course, not available for this purpose, since gamma globulin is well established as a valuable agent in the control of measles and infectious hepatitis. Provision must be made to meet these needs. Furthermore, since gamma globulin is a product derived from human blood, consideration must be given to the military and civilian requirements for whole blood, plasma and albumin.

To assure an equitable distribution, the Office of Defense Mobilization was assigned the task of coordinating the National Blood Program. The Office of Defense Mobilization turned for advice to the National Research Council, who recommended an allocation program and a system of controlled distribution.

SOURCE

Gamma Globulin is the name given to one of several fractions of the protein component of human plasma, and is comparable with the product officially known as Immune Serum Globulin. It is prepared commercially by a method involving a series of precipitations with varying concentrations of alcohol under controlled conditions of acidity and low temperature. An average donation of blood (500 c.c.) yields 7 c.c. of a 16 per cent solution, representing a single recommended dose for the prophylaxis of poliomyelitis in a fifty-pound child. The production capacity of existing fractionating plants is limited.

ADMINISTRATION OF GAMMA GLOBULIN

The solution is opalescent and somewhat viscous, necessitating injection through a No. 18 or 20 gauge needle in the quantities required for prophylaxis of poliomyelitis. Injections should be made intramuscularly, never intravenously. The use of separate syringes is recommended because of the danger of contamination of the syringe with blood containing the virus of homologous serum hepatitis. No instance of hepatitis has been recorded following the use of gamma globulin which was administered with a separate syringe and needle for each subject.

REACTIONS

The intramuscular injection of gamma globulin is not accompanied by any significant reactions. The danger of local or systemic reactions must be considered if repeated injections are contemplated.

USE

Measles — A dose of 0.1 c.c. per pound body weight given soon after exposure will prevent infection in most cases. Administration later in the incubation period will result in modification of the disease. A dose of 0.02 c.c. per pound body weight will usually modify the severity of the attack if given soon after exposure. It is suggested that modification be attempted in all children below the age of three years who have been exposed.

Prevention rather than modification may be warranted in hospital situations involving debilitated children and in individual cases where there is concurrent serious disease.

The selection of exposed children rarely presents difficulties since the contact is almost always a frank clinical case and the time of exposure can usually be determined. A history of previous attack of measles should suffice to distinguish immune from susceptible children.

Infectious Hepatitis — Recommended dose at the present time is 0.02 c.c. per pound body weight. There is evidence that lower doses will modify the disease.

In the general population, prophylaxis with gamma globulin among the family and intimate contacts of cases would appear to be desirable. At the same time, hygienic controls and the typhoid-type of isolation of non-icteric as well as jaundiced cases should be instituted.

Poliomyelitis — Two reports have demonstrated significant protection from the second to the fifth week following injection and diminishing protection from the sixth to eighth week. There was evidence of mitigation of paralysis in the cases occuring in children who had received gamma globulin, This evidence is the basis for the conclusion that gamma globulin will be most effective if given shortly before or as soon as possible after infection. It is of no value after clinical symptoms have become apparent. The average dose approximated 0.14 c.c. per pound of body weight.

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*Abstract of a Bulletin by the same title released by the Division of Medical Sciences National Research Council, April 20, 1953.

CRITERIA FOR DIAGNOSIS

Diagnostic criteria of paralytic or nonparalytic poliomyelitis should generally include three or more of the following:

1. History compatible with poliomyelitis.
2. Fever.
3. Stiff neck and/or stiff back.
4. 10 to 500 cells per c.c. of spinal fluid taken during the acute or early convalescent period of the disease.
5. Spinal fluid protein elevated above normal limits.
6. Demonstrable muscle weakness or paralysis.

Cases which present only (1) and (2) above should be classified as presumptive (abortive) poliomyelitis.

Paralytic cases are defined as those in which definite weakness or paralysis has been detected and persisted during at least two examinations made at intervals of at least several hours. Results of examination of muscles of the extremities or trunk may be very unreliable during the period of muscle tenderness or "spasm."

COMMUNITY PROPHYLAXIS

Community prophylaxis of age groups at the greatest risk is indicated only in areas in which the incidence is exceptionally high and the onset of the epidemic is abrupt.

A selection of areas and age groups for community prophylaxis will be made by the State Health Officer, who must support such a request to the National Allocation Office with information on the case incidence by week of onset, the number of deaths and of respirator cases, and the ratio of paralytic to total reported cases in the area.

HOUSEHOLD CONTACTS OF CLINICALLY DIAGNOSED CASES

During epidemics, the incidence of secondary cases in families is five to twenty times the rate in the general population. This would appear to be good reason to give priority to the prophylaxis of family contacts. There is much evidence to indicate that infection is often widespread in families at the time the first case is recognized.

Sixty per cent of secondary cases occur within five days of the diagnosis of the first case. Even if gamma globulin is promptly administered to household contacts, it will not be expected to prevent or modify the severity of disease in these cases since significant protection does not begin until the second week.

An additional thirty per cent of secondary cases will occur within a few days after inoculation, but studies suggest that infection in this group may be mitigated in severity.

The final ten per cent of the secondary cases will occur in the period in which the protective effect of gamma globulin is maximal, and it is this fraction of cases that one may hope to prevent by the use of household prophylaxis.

The responsibility for diagnosis and the identification and innoculation of contacts rests with the private physician.

One suggested disadvantage needs consideration. Some sixty per cent of secondary family cases will be neither prevented nor modified by the use of gamma globulin. Unless physicians and the public are fully informed of this situation, the public will see the failure of prophylaxis, the successes will be hidden, and an unjustifiably critical attitude toward the value of gamma globulin will develop.

INTIMATE CONTACTS OF CLINICALLY DIAGNOSED CASES

This extension of household prophylaxis to include individuals who are judged to have been as intimately associated with the case as were members of the household may seem logical, but raises the difficulty of defining the criteria of intimacy. (This has been defined by the State Polio Coordinating Committee as anyone who has been in contact with the patient for 24 hours during the 72 hours preceding the diagnosis of the case). This method must be used with restraint; otherwise, the allocations to States will be rapidly depleted.

SUMMARY

Gamma globulin is available in severely limited quantities. It is valuable in uses other than the prophylaxis of poliomyelitis, and a portion of the available supply must be reserved for these uses. Even if the entire supply were available for the prophylaxis of poliomyelitis, the amount available this summer would provide average prophylactic dosages for only slightly more than three per cent of the most susceptible age group.

This situation requires a most judicious utilization of the supply available in the treatment of household contacts of poliomyelitis, the method demonstrated to be most likely to give favorable results with the least squandering of the supply.

The criteria for instituting supplemental methods of control are: A sharply rising weekly incidence calculated by dates of onset; high paralytic rates; and relatively increased percentages of respirator cases and deaths.

Unless physicians, and through them the public, are fully informed as to the mathematical probabilities of preventing or modifying infection through the use of gamma globulin, there is danger of a loss of public confidence in this valuable tool in the control of poliomyelitis.

COMMENT

The success of a program of prophylaxis and the conservation of a critically limited supply of gamma globulin are therefore dependent upon the prompt reporting of cases as soon as diagnosed, including the occurrence of paralysis, or death. Where paralysis or death occur in a previously reported case, supplemental reports (in addition to the routine death certificate) should be filed as soon as possible. Morbidity reports should include date of onset, the type of poliomyelitis as to paralytic or non-paralytic, and the fact of death if it has occurred prior to the time of report. Only when such information reaches the State Health Officer expeditiously can he be in a position to evaluate the situation in any given area, to recommend the institution of supplemental control measures, and to furnish the national allocating authority with the data required to justify supplemental allocations of gamma globulin.

The antituberculosis movement synthesized in one single crusade the efforts of sociologists, humanitarians, and hygienists to improve the fate of the destitute by social reforms; to strengthen the human body by advocating a healthy way of life; to control infection by tracking and destroying the tubercle bacilli. (Rene J. Dubos, M.D., The American Review of TB, July, 1953.)

The Woman's Auxiliary

THE COUNCILOR SYSTEM

An attempt has been made for the last two years to put into use in Nebraska a councilor system which might effectively coordinate auxiliary interests among our widely scattered units. So far, their work in certain fields has been most helpful and we have been happy to draw into the auxiliary, as members-at-large, all councilors who do not have the advantage of an auxiliary in their districts. Their service to the state, we trust, is retroactive in the pleasure and benefit they receive through this association.

The Councilor Districts are defined by the State Medical Association for purposes of administration and representation. The Nebraska State Medical Journal for February, 1953, lists the Councilor Districts and Counties, and if we could extend auxiliary enthusiasm into every district through a councilor in it, we would reach counties that have no organized units.

We aspire to draw every doctor's wife in Nebraska into the auxiliary membership. We hope to reach her periodically — this year — with a News Letter which will be both friendly and informative. We want to hear from her and we want her to hear about activities from all parts of the state. We want every doctor's wife to take pride in what the state auxiliary can accomplish and believe that success depends on coordinated effort sparked, perhaps, by a councilor.

An organized auxiliary with a councilor has the advantage of one more working member in addition to its officers. Specified duties for officers are sufficient to keep them busy so that liaison duties could well be performed by a councilor for the district.

As recommended in the "Handbook," a guide published by the auxiliary to the A.M.A. for state and county auxiliaries, we shall again appoint councils whose duties are outlined, in part, as follows:

1. To serve as members of the State Board of Directors.

2. To arrange for visits of the state president or of other officials to the counties in her district.

3. To serve as advisor to the county auxiliaries and help strengthen their organization.

4. To help organize any unorganized county at the request of Chairman of Organization.

(A limited number served as hostesses during the Annual Meeting in May—a most commendable service).

The following councilors have been named to the Executive Board:

Dist. No. 1—Mrs. Arnold McDermott, Omaha
Dist. No. 2—Mrs. O. E. Liston, Elmwood
Dist. No. 3—Mrs. Paul M. Scott, Auburn
Dist. No. 4—Mrs. A. W. Anderson, West Point
Dist. No. 5—Mrs. Rudolph Seivers, Blair
Dist. No. 6—Mrs. Robert Harry, York
Dist. No. 7—Mrs. Harvey E. Runty, DeWitt
Dist. No. 8—Mrs. W. E. Johnson, Valentine
Dist. No. 9—Mrs. Theo. Koefoot, Jr., Broken Bow
Dist. No. 10—Mrs. Frederick M. Karrer, McCook
Dist. No. 11—Mrs. R. B. Rundquist, Chappell
Dist. No. 12—Mrs. Robert J. Morgan, Alliance

Mrs. J. P. Tollman of Omaha has been appointed as chairman of the newly formed committee on Medical Education Foundation.

MRS. JAMES P. DONELAN,
State President.

Know Your Blue Shield Plan

Nebraska Blue Cross-Blue Shield Plans will again be represented at the Nebraska State Fair in Lincoln, September 6-11. Promotional literature will be distributed at the Plans' booth in the Industrial Arts Building, and applicants for Individual membership will be enrolled.

This month, Nebraska doctors will have an opportunity to order a supply of double postcards for enclosure with October 1 statements to patients. One half of the card carries a message recommending Blue Cross-Blue Shield, and the other half is a reply card which the patient may detach and mail to obtain enrollment information.

SIX MONTHS' REPORT OF NEBRASKA BLUE CROSS-BLUE SHIELD PLANS

	Blue Cross	Blue Shield
Membership, July 1, 1953	225,481	197,011
Cases, January 1-July 1, 1953	21,458	34,849
Payments, January 1-July 1, 1953	$1,418,465.00	$1,013,458.00
Average Cost Per Case	70.01	29.87
Percent of Income Paid for Cases	83.54	85.85
Percent of Income for Operating Expense	6.44	8.94
Percent of Income for Reserves	10.02	5.21

Reminder: Payment for services to members of Blue Shield Plans in other states is expedited if reports are sent directly to that Plan. The Nebraska Blue Shield report form may be used, because most Blue Shield Plans accept it, making payments on the basis of their own schedules.

She'd Kill the Goose That Lays the Golden Egg!

"Are you sure I've had everything that's covered by Blue Cross?"

Doctors can safeguard the financial stability of Blue Cross-Blue Shield by refusing to order any unnecessary utilization of benefits. Just one extra day of hospitalization per Blue Cross patient would cost Nebraska Blue Cross $42,000 a month—$500,000 per year! Undue usage could break Blue Shield, too.

Deaths

Richard Hart Young, M.D., Omaha. Doctor Young died the evening of August 10, in a New York Hospital. He was forty-nine years old. He graduated from the University of Nebraska College of Medicine in 1930, interned at Peter Bent Brigham Hospital, took training in neurology and psychiatry at Bellevue Hospital, New York City, and at Johns Hopkins in Baltimore. He became professor of neuropsychiatry at Nebraska in 1934 and head of the department in 1947. Under his direction, the Nebraska Psychiatric Unit was developed. Doctor Young is survived by his wife, Katherine; daughters, Gail, Daphne, Diane and Susan; his parents, Dr. and Mrs. G. A. Young; brother, G. A. Young, Jr., and two sisters.

Thomas W. Torpy, M.D., Omaha. Doctor Torpy died in an Omaha Hospital on July 9. He was sixty years old and had been a member of the faculty of Creighton University School of Medicine for twenty-eight years. He was a graduate of Creighton and on the staff of St. Catherine's and St. Joseph's hospitals. Doctor Torpy is survived by his wife, Eva.

Charles Frandsen, M.D., Omaha. Doctor Frandsen was sixty-four years old when he died on June 20. He graduated from the University of Nebraska College of Medicine, served in the first World War, practiced in Omaha since 1926 and was a member of the university faculty for twenty-five years. He was president of the staff of Immanuel Hospital. The doctor is survived by his wife; a son, Lt. Herbert Frandsen; three daughters, Mrs. J. T. Van Dyck, Paris, Tenn., Mrs. Phillip Van Dyck, Cottage Grove, Tenn., and Mrs. R. L. Seiter of Omaha; and his mother, Mrs. Martha Sorensen of Omaha.

Joseph Edward Davis, M.D., Albion. Doctor Davis died at a Norfolk hospital, July 19, at the age of eighty years. He was born in Missouri, graduated from University Medical College in Kansas City, did graduate work in Chelses Hospital for Women and Great Armon Street Hospital in London. He practiced in Petersburg from 1900 to 1918 at which time he moved to Albion. The doctor is survived by his widow, Nelle; a son, Valentine of St. Paul, Minn.; and a daughter, Mrs. Robert Walker of Omaha.

Human Interest Tales

Comunications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. Lester Forney, is recovering from an operation in the Crete hospital.

Dr. Robert C. Kelley, Omaha, has opened his medical offices in Woodbine, Iowa.

Dr. Harold Gentry is now affiliated with the Gentry Medical Center of Gering.

Dr. Thomas W. Moore, Scottsbluff, is now associated with the Scottsbluff Clinic.

Dr. Edward Houfek, Schuyler, and family, have returned to Omaha to make their home.

Dr. C. D. Howard and family of Blair, have returned home after a vacation in Colorado.

Dr. Robert McGee, Howells, will continue practice in Howells, instead of moving to Albion.

Dr. and Mrs. F. L. Simonds, Omaha, have just returned from a three-month vacation in Europe.

Dr. U. S. Harrison, Neligh, is the new president of the Antelope Memorial Hospital Medical staff.

Dr. R. W. Homan, Crete, delivered the 500th baby to be born at the Crete Municipal hospital on July 10th.

Dr. J. M. F. Heumann, Omaha, has left for a trip to New York and then to Germany to visit relatives.

Dr. Byron D. Petersen, Bridgeport, resumed his practice in this city following his release from the Army.

Dr. Neil Bentley, Scotia, has announced his intention of opening offices in Oxford in the near future.

Dr. Richard McDonnel, Omaha, has been recalled to service with the Navy and will report for duty August 5.

Dr. John H. Bogle, Brooklyn, N. Y., will join the staff of the Loup City Clinic in the early part of August.

Dr. and Mrs. C. J. Miller, Ord, have returned home after several weeks vacation in New Mexico and Colorado.

Dr. Charles W. Way, Wahoo, has been appointed Chief Medical Officer of Veterans Administration Office, Omaha.

Dr. F. H. Rogers, Wolbach, returned home after receiving medical treatment at the Memorial hospital in St. Paul.

Dr. Wallace J. Vnuk, Colman, South Dakota, is making plans to practice medicine in Hooper beginning August 1st.

Dr. John W. Rogers, Trenton, has closed his practice in this town and is now practicing in Lincoln at 6125 Havelock Avenue.

Dr. Edwin B. Bradley, Spencer, has announced his retirement from the practice of medicine after 50 years in the profession.

Dr. J. E. Ingram, Nelson, suffered an attack of asthma during the early part of July and is recovering at a Hastings hospital.

Dr. Harvey S. Gassman, Pine Ridge, was admitted to the Veterans Hospital at Hot Springs, South Dakota on August 2.

Work has begun on the new office building of Dr. L. C. Kavan of Schuyler, the building will house complete facilities for two doctors.

Dr. L. C. Grubbs and family of Mitchell, have moved to Scottsbluff and Dr. E. J. Loeffel and family of Gering, are moving to Mitchell.

Dr. Francis Neumayer, has been transferred from the veterans hospital at Lincoln, to the Bay Pines veterans hospital, St. Petersburg, Florida.

Dr. G. Lee Sandritter, superintendent of the Hastings State Hospital, spoke recently at the annual ladies night picnic of the Hastings Kiwanis Club.

Dr. A. C. Colman, Chappell, suffered another heart attack during the early part of July and at last word was still confined in a Lincoln hospital.

Dr. Lee Rice, recently released from active duty, is visiting his parents Dr. and Mrs. C. E. Rice of Odell, prior to continuing post-graduate work this fall.

Dr. John G. Minder, Lincoln, will open his offices in Alma on August 1st. Doctor Minder is a graduate of the University of Nebraska College of Medicine.

Dr. John R. Thompson, Lincoln, has recently completed his internship at the Lincoln General Hospital and will begin the practice of medicine in Auburn.

Dr. Robert Fenstermacher, Nebraska City, delivered a baby in an unusual place. The doctor delivered the baby in a car parked on the side of the highway.

Dr. Harold Panzer, Scottsbluff. recently made an emergency flight to Omaha with one of his patients and at last report the patient was reported in good condition.

Dr. George O. Austria will officially open his offices in Sutton on July 13. Doctor Austria is a graduate of the Creighton University School of Medicine.

Dr. H. W. McFadden, Omaha, chief of the Nebraska region Veterans Administration, has announced his retirement from that office, effective July 31st.

Dr. J. Hewitt Judd and family of Omaha, have departed on a month's vacation in the Northeast part of the country. Some time will also be spent in Canada.

Dr. Horace Munger, Lincoln, is the new president of the City-County Board of Health. Dr. Munger is a representative of the Lancaster County Medical Society.

Dr. W. L. Howell and family of Hyannis, made a recent trip to Scottsbluff to visit their daughter Kathryn Howell who is medical record librarian at St. Mary hospital.

Dr. J. G. John Beattie, Ainsworth, has accepted a surgical residency at the University of Nebraska College of Medicine, upon his release from active duty with the Navy.

Dr. Wayne Brewster, Holdrege, head of the Bi-States Company, has announced that a new television station will be built near Artell to improve reception in that area.

Dr. Richard Overholt, chief of the Overholt Thoracic Clinic Boston Massachusetts, addressed members of the Scottsbluff County Medical Society at a meeting recently.

Dr. R. E. Kriz, Lynch, at a recent dedication ceremony, presented his home town with a swimming pool. The doctor's reason for the gift was, "because the kids needed it."

Mr. Robert H. Westfall, Nebraska City, and Miss Lois L. Johnson, Madison, were married June 28 in Madison. Mr. Westfall is a junior at the University of Nebraska College of Medicine.

Dr. Frank J. Barta, Omaha, discussed the subject "the Science of Psychiatry" at the fourth annual convention of the Guild of Catholic Psychiatrists, held in Los Angeles in May.

Miss Irene Rau and Doctor Joseph D. McCarthy were married, July 14, at Evergreen, Colorado. After a wedding trip to Honolulu, they will be at home at 5624 Emile Street, Omaha.

Drs. Elmer Hobbs, B. E. Taylor and Robert O. Bailey recently attended the National Polio Foundation's Southwestern Respiratory and Rehabilitation Center clinic at Houston, Texas.

Dr. and Mrs. Russell Gustavson, Scribner, spent several days in Lincoln visiting their parents. After a short stay Doctor Gustavson left for Portland, Oregon, to resume his hospital duties.

Dr. S. P. Wiley, announced that Dr. Gerhard T. Schmunk is now associated with him in the Gering Clinic. Dr. Schmunk is a graduate of the University of Nebraska College of Medicine.

Dr. Robert Langdon, Omaha, is now associated with Dr. Rex W. Wilson in the practice of medicine at O'Neill. Doctor Langdon is a graduate of the Creighton University School of Medicine.

Dr. Warren C. Jenkins, Blair, and Miss Joan K. Prizer, Lake Bluff, Illinois, have recently announced their engagement. Doctor Jenkins is a graduate of Northwestern University Medical School.

Dr. W. Joseph McMartin, Omaha, has been chosen President-Elect of the American Urological Association, and will also be the president of the Omaha-Douglas County Board of Health, effective July 1.

Dr. K. J. Kennedy, Fairbury, paid a visit to the health education class at Fairbury college recently, and discussed human relationships and also conducted a question and answer period with the class.

The Beaver Valley Clinic was presented with a gift of furnishings for the waiting room. The gift was from Mr. and Mrs. William Boone in memory of Mrs. Boone's father, the late Dr. T. R. Butler.

Directors of the Greeley Health Center have decided to sell its property at public auction. A building to house a health center probably will be erected, if a physician can be induced to locate in Greeley.

Dr. Donald H. Bendorf is now residing in Schuyler where he is associated with Dr. L. C. Kavan in the practice of medicine. Doctor Bendorf is a graduate of the Creighton University School of Medicine.

Dr. Edward E. Houfek has been discharged from the United States Air Force and has become associated with the office of Drs. Young, Drs. Wigton and Aita in the practice of Neurology and Psychiatry.

Dr. A. W. Abts, Humphrey, has announced his intention of leaving the city temporarily and locating in Omaha. He will retain his office in Humphrey, and is endeavoring to find a replacement during his leave of absence.

Dr. George F. Hoffmeister, son of Dr. and Mrs. George Hoffmeister of Imperial, is the new associate of Dr. J. E. Uridil in Hastings. Doctor Hoffmeister is a graduate of the University of Nebraska College of Medicine.

Dr. Willard Peck and family of Minden, made a trip to visit friends in Falls City recently, prior to leaving for St. Paul, Minnesota, where Doctor Peck plans to enter the University of Minnesota this fall, where he has a fellowship.

Dr. Guy B. Ira, Lynch, celebrated his 80th birthday on July 22. A large group of Lynch friends dropped in to wish the Doctor a "happy birthday". Doctor Ira is a graduate of the University of Nebraska, and came to Lynch in 1897.

John E. Hansen Jr., and Miss Helen M. Williams, Dundas, Minnesota, were united in marriage on June 22nd. Mr. Hansen is a graduate of Dana College and is now continuing his study at the University of Nebraska College of Medicine.

Dr. J. C. Hubenbecker, Morse Bluff, was guest of honor at a surprise party celebrating both his birthday and his 38 years in the medical profession. Doctor Hubenbecker was given a platform rocker by the group who entertained him.

Dr. R. D. Bryson, Callaway, received an unusual gift for his many years of service to the community. The Episcopal Guild presented him with a quilt bearing the names of 1,000 children that he has delivered. More than 1,400 additional names could have been added.

Dr. George F. Simanek, Omaha, who has been in the hospital since January 9, with a broken hip and wrist, was the receipent of a Fifty Year Service pin on his 73rd birthday. The presentation was made by Dr. James F. Kelly, president of the Nebraska State Medical Association.

The deepest sympathy of the Nebraska State Medical Association, is extended to the family of Dr. Thomas W. Torpy, who passed away July 9 in Omaha. Doctor Torpy had been active on the Creighton University School of Medicine faculty for 28 years and was also a graduate of that school.

Dr. Jack Stemper of the University of Nebraska Health Service, says doctors, "have come to realize that it is most important to treat the whole individual and not just a part." Doctor Stemper spoke at a panel summer discussion series with Dr. I. William Brill, chief of the mental hygiene department of the health service, and Dr. S. I. Fuenning, health service director.

Tuberculosis Abstracts

TUBERCULOUS INFECTION IN THE LIGHT OF TUBERCULIN MATRICULATION

(Editor's Note: The decline in the tuberculosis death rate in some sections of the United States has led to a situation in which virtual eradication in these local areas is now a possibility. In this connection the summary of an extended study of the epidemiology of tuberculosis in a rural population in Norway is presented. The material, of which the article cited is but a part, was published in book form in the Norwegian language).

Tuberculosis control measures may be based on the assumption that early treatment hinders existing or potential sources of infection from spreading the disease, and shortens the duration of institutional treatment. If most cases of pulmonary tuberculosis develop soon after infection, then the demonstration of the change from a negative to a positive tuberculin reaction provides the earliest diagnosis.

Tuberculin matriculation was the term applied to tuberculin testing of the whole population, which was then divided into a tuberculin-positive and a tuberculin-negative group. The latter was retested with tuberculin at suitable intervals. The positive group and the converters were kept under radiological observation until the risk of disease was minimal and were retested with tuberculin at long intervals.

When, in 1937, the author began to carry out tuberculin matriculation, several questions arose. Was tuberculin matriculation feasible in Norway? What was likely to be discovered with regard to tuberculous infection, disease and transmission? Can tuberculous infection be controlled? Can the further spread of infection, morbidity and mortality be influenced thereby?

The experiment was made in the medical district of Kinn with a population of about 6,500 persons engaged, for the most part, in fishing and farming. In each school district all inhabited houses were mapped and numbered. All households were listed with the name and occupation of each family member and information concerning the tuberculin reaction, tuberculin conversion, illness, contact with tuberculosis and x-ray examinations. Individual health examination cards were filed by families. The cards of persons with notified tuberculous disease and converters were kept in a separate file, the tuberculosis register. The nurses who did most of the work in tuberculin matriculation also had a generalized public health program.

The study proved that it was possible within a limited area to reduce the spread of infection from primary infection tuberculosis, that is, pulmonary tuberculosis developing during the first few years after infection. This is notably the case with tuberculosis in juvenile. However, in a few instances spread of the disease occurred even in the primary phase before diagnosis. In some instances control has been deficient. It has proved impossible to prevent all infections by juvenile sources of infection among newcomers and visitors. Many of these individuals had, presumably, primary infection tuberculosis (hilus cavities in two cases). When tuberculosis control is effected throughout the country it should be possible to protect ourselves against such infections. But spread of the disease continues owing to new outbreaks of old disease, relapses or progressive changes occurring long after the orignal infection. Progressive disease often follows defective treatment and observation. Spread of infection may also be due to defective cooperation between physicians and the health councils, and lack of continuity in local health activities. Many patients feared relapse and tried to avoid examination.

In most cases the spread of infection could be avoided by more vigorous treatment and more complete follow-up of older patients with tuberculosis. Yet, however accurately we carry out the health examinations, we cannot achieve complete victory over infection until the public has become better informed. It sometimes happens that an infectious form of primary pulmonary tuberculosis runs such a rapid course that others have been infected before the next scheduled examination. A flare-up of an older infection may also occur rapidly. In many instances the ignorance and asocial attitude of the sources of infection have contributed to the spread of infection. There is a difference between infectious and infecting pulmonary tuberculosis. We consider every person with lung infiltrations and bacilli found through smear or gastric lavage, or with only a suspect cavity, to have "infectious tuberculosis." This estimation, however, gives misleading figures of the frequency of infecting tuberculosis.

Even if we realize how dangerous some infection sources may be, we are impressed by the low infectiousness of pulmonary tuberculosis. This may be a question of intimacy of contact or of virulence and viability, that is, the infecting capacity of the tubercle bacilli from different types of pulmonary tuberculosis. These problems are important in the evaluation of our chances to establish efficient epidemiological control of tuberculosis, which are probably much greater than was formerly believed in Norway.

Tuberculin matriculation is a feasible method in tuberculosis control in small towns and rural areas if public health nurses are available. The development of infection may be followed from an early stage and the spread of the disease traced. Moreover, it gives information for a clearer insight into the epidemiology. The facts permit us to consider tuberculosis as a disease which can be fought by epidemiological means which permit early detection and treatment of primary infections and their infectious sources. The lower the infection rate is in a region, the more important is the epidemiological approach compared with other mass examination methods. As tuberculosis decreases, it becomes important to combine tuberculin matriculation with general health examinations. This plan leads to decentralization of tuberculosis control and to closer and more permanent supervision of the "healthy" population.

Mass radiography as a screening mechanism, though of importance in cities and in persons past middle age, will not be the basic method in the long run. By repeated tuberculin testing it is possible to uncover fresh primary infections and to focus control efforts on the most important group —recently infected persons. X-ray examination of uninfected persons is thereby avoided.

Another valuable supplement is BCG vaccination of exposed persons. However, in regions with low infection rates, mass vaccination will be scarcely practical. A steadily increasing number of persons has to be vaccinated and protected against a diminishing threat. Most important, mass vaccination deprives us of the power to distinguish between the infected and the uninfected making x-ray examination of all the population necessary. Finally, a cardinal factor in making a correct prognosis of a primary tuberculous infection is the knowledge of the time of onset. This factor cannot be known in a vaccinated population.

Therefore, it is concluded that tuberculin matriculation is the fundamental principle in tuberculosis control of the future in regions or populations with low infection rates. The less frequent the occurrence of tuberculosis, the more selective the method must be.

—By Tobias Gedde-Dahl, M.D., The American Journal of Hygiene, September, 1952.

ARMY SURGEON GENERAL AUTHORIZES SERVICE-WIDE TESTS OF PLASMA SUBSTITUTE

The Army Medical Service has broadened its tests of dextran, a plasma substitute derived from sugar, to include all medical units in this country and overseas theaters, Major General George E. Armstrong, MC, the Surgeon General, announced today. Army physicians have been authorized to requisition and use dextran wherever they believe it may be suitably employed in place of plasma.

Extensive trials of dextran in military and civilian hospitals in the United States and on combat casualties in Korea have shown that the polysaccharide plasma expander possesses many of the qualities of blood plasma and may eventually supplant plasma if present findings are confirmed.

General Armstrong emphasized, however, that the Army's requirements for whole blood, currently used in the ratio of three to one with plasma, would be undiminished by the substitution of dextran or serum albumin for plasma. Only whole blood, he said, contains the living red cells necessary to the recovery of casualties who have lost more than 30 per cent of their circulating blood volume.

Developed as a volume expander for the circulatory system by the Swedes during World War II, dextran is the product of the action of bacteria on ordinary cane sugar, molasses or beet juice. The original Swedish dextran, which accounted for a high percentage of allergic reactions in patients receiving it, has been considerably modified by American and British research scientists who now believe that dextran will cause fewer such reactions than plasma or blood itself.

General Armstrong reported that dextran appeared to be of greatest value in resuscitating patients in acute shock and in maintaining blood pressure in those undergoing major surgical operations.

An easily manufactured inorganic material, dextran appeared to be of greatest value in resuscitating patients in acute shock and in maintaining blood pressure in those undergoing major surgical operations.

An easily manufactured inorganic material, dextran has the added advantage of being free of contamination by bacteria or viruses, including the virus of serum hepatitis which is frequently transmitted by blood plasma. Dextran costs about $6.50 per 500-cc. bottle, compared to approximately $27 for processing a unit of plasma.

Army medical authorities consider dextran or some comparable plasma substitute would be indispensable in a full-scale war, because supplies of whole blood and plasma would be inadequate for large numbers of military and civilian casualties. For this reason, they are desirous of testing dextran on the widest possible scale at this time, both to determine precisely its clinical effectiveness and to familiarize service doctors with its use.

The National Research Council has already recommended that dextran be stockpiled for use in cases of emergency by the armed forces and the Federal Civil Defense Administration. The substance has also been approved by the Federal Food and Drug Administration.

The first trials of dextran among combat casualties were conducted last summer by a three-man Army medical research team headed by Colonel William H. Amspacher, MC, Director of the Army's Surgical Research Unit, and including Dr. Anthony R. Curreri of the University of Wisconsin Medical School, Consultant to the Surgeon General, and First Lieutenant Thomas M. Cloud, MC, a member of the Surgical Research Unit.

The team reported in July that dextran had been used with highly encouraging results on 61 combat casualties both alone and in combination with whole blood, plasma or serum albumin. More extensive front-line tests were begun in Korea late last fall. The results of this "user-trial," being conducted primarily at battalion aid stations and other forward medical facilities, will be available sometime in April.

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EDITORIAL

OUR DEMOCRACY IN THE AMERICAN MEDICAL ASSOCIATION

Unity of action by a group of people, exercised for any purpose, frequently attains the desired result. When such unity of action is decreed by an all-powerful person, or by a minority group, it constitutes an autocratic policy; when decreed by those appointed to do it, by the majority of their constituents, the attitude is democratic. The activities of the American Medical Association are of a highly democratic character, reflecting the will and the attitude of the constituency, an association of 160,000 physicians.

The actions carried out by the officers and committees of the American Medical Association are rarely, if ever, precipitate. They are, on the other hand, based upon careful research, scrutiny of facts, deliberate consideration, and the application of seasoned judgment. Definitive action is often delayed when, to the casual observer, further delay seems unnecessary. Whenever further consideration, repeated consultation with all interested parties, and more detailed discussion of a problem may lead to a better estimate of the correct course of action to be followed and of the probable outcome of the contemplated action, then that action is usually deferred.

One can point out in A.M.A. history a great many instances to illustrate final action based upon deliberation and concerted judgment. A few such examples, among many, are as follows: The organization of the campaign that temporarily defeated socialized medicine; the evolution of the methods of inspection and approval of hospitals; the interne training program; the matching method of interne assignment; the temporary resolution of the matter of a Federal Department of Health; the question of whether osteopathy is still a cult; the Hawley incident; and the search for the correct answer concerning the treatment of patients suffering from non-service-connected disabilities by Veterans Administration hospitals.

Examination of the last of these items in more detail will bear out the thesis stated above, namely, that the American Medical Association acts in a unified, democratic manner, according to the dictates of its constituent societies and members, but with dignity and restraint. The forcefulness of its activities is based upon a foreknowledge of facts, but is tempered by an understanding of the effects of the successful consummation of the project.

The Association has always assumed that Federal legislation was designed, originally, to assure adequate medical care for veterans whose disabilities were incurred during, or aggravated by, military service. The intent of the law seems to have become gradually altered, however, so that during the fiscal year, 1951, more than eighty per cent of patients discharged from veterans' hospitals had received treatment for non-service-connected disabilities, and more than sixty per cent of those remaining in these hospitals at the end of that year belonged in this category. To the American Medical Association, such tendencies have appeared highly inadvisable.

This growing preponderance of patients having non-service-connected disabilities treated in veterans' hospitals was the factor, therefore, that finally induced the House of Delegates of the American Medical Association to decide that the entire question of Federal Medical Care should be investigated. Accordingly, a committee appointed by the

Board of Trustees of the A.M.A., following its policy of concerted deliberation, undertook to investigate this complex problem.

The very complete, accurate, and voluminous report of this investigating committee, together with recommendations based upon their study, was submitted to the A.M.A. House of Delegates in December, 1952. It seemed that this report, with the recommendations founded upon its revelations, was adequate to warrant immediate action. However, the House did not act upon the recommendations, but again conforming to its tradition of deliberation, asked that further study be made. It was not until June, 1953, eighteen months after the investigation was initiated, that judgment became clear and action was decided upon.

When the campaign based upon the recommendations of this invesigating committee begins, we can feel assured that it will be based on factual evidence. It will represent the response to opinions founded upon serious study of the rightness of the course of action as well as a thorough knowledge of the far reaching effects of success or of defeat. It will express, by action, the democratic policy of the constituency of the American Medical Association, formulated after the traditional concerted deliberation.

THE OMAHA MID-WEST ASSEMBLY

October brings us wonderful autumn weather and its brilliantly colored folliage, the hunting season, the football games, the harvest, frost to stop hay fever, and many other things that make life seem good. Perhaps the topping for all else, in the fall, is the annual assembly of the Omaha Mid-West Clinical Society. All of us probably are aware by this time, that the present October will present us with this excellent postgraduate assembly on the twenty-sixth to twenty-ninth, inclusive. It will take place, as usual, at the Hotel Paxton in Omaha.

A careful scrutiny of the program, that is to be found in the September issue of the Journal, reveals many interesting things. You will find, for example, that twelve outstanding speakers will crowd the mornings, afternoons and evenings with interesting information. These noted guest speakers come from ten great universities, scattered from coast to coast as well as from the deep South; one hails from a great clinic in Boston; and one will give us information about legal affairs, as related to the practice of medicine.

The subjects to be dealt with by these speakers range widely through the field of medicine and should yield a harvest of information for general practictioner and specialist alike. Nutrition and metabolin, malignant diseases, anemias, diseases of the eyes, psychiatric problems, geriatrics, endocrine diseases, and many other fields and subjects are included . In addition, there will be the usual noon-time panel discussions on a great variety of interesting subjects, and the 1:00 o'clock buffet luncheons with good medical talks by guest speakers as an additional dessert. The only meal you will be expected to have in complete relaxation will be breakfast, because dinner is also followed by a dose of medical lore — an evening session, from 8:15 to 10:00 right up to and including Thursday, the 29th, with final adjournment at 10:00 p.m. Furthermore, you will want to hear that Thursday evening program.

We can not afford to miss this meeting!

WHERE IS THE MEDICAL CARE PROGRAM OF THE VETERANS ADMINISTRATION HEADED?

(Guest Editorial)

Perhaps one of the most important issues facing the American people today is the question of medical care for the Veterans with non-service-connected disabilities. The strain on the economy of the country as a whole, the tremendous burden to every taxpayer—and this includes every veteran taxpayer—and the inevitable forcing of higher costs in private hospitals because of competition with government, are but some of the existing dangers. An even more insidious threat is the socialization of medicine — by the "back door."

The facts are alarming. Because of the rapidly increasing number of veterans in civilian life (there are now more than 20 million and this figure is increasing at the rate of one million per year) the United States is rapidly approaching the time when veterans and their families, who now total one-fourth of the population, will constitute the majority of the population.

Late in 1952, there were 154 Veterans Administration hospitals, operating, in all, 116,986 beds. There are 18 new hospitals, together with four additions, under construction—a total of 13,231 more beds. Advance plans were to add six new hospitals with 5,000 more beds. Looking ahead to 1975, it is anticipated there will be a requirement of some 400,000 beds to care for veterans under the existing laws. These facts alone show the problem that is facing the country today.

No right-thinking, loyal American citizen questions the debt the government owes to the man who is injured in serving his country. Every veteran with a service-connected disability should be given the best medical care that can be provided at government expense. However, as President-elect E. J. McCormick of the American Medical Association stated in a talk at the Rocky Mountain Radiological Society in Denver, Colorado, on August 21, 1953: "We in the A.M.A. feel that Congress should decide whether existing legislation providing hospitalization and medical care for veterans with non-service-connected disabilities is sound, whether the federal government should continue to engage in a gigantic medical care program in competition with state, local, and private medical institutions where the veteran who breaks his arm in an automobile accident 5-10 or 20 years after his discharge may go to a VA hospital for free care instead of to his local hospital, and whether the ever-increasing cost of such a program is a proper burden to impose on the taxpayers of this country. We further feel that consideration of these problems must be predicated upon a concern for the health and welfare of the entire population and not for a particular segment."

With the existing laws on VA medical care, a veteran can receive care for any non-service-connected disability simply by signing the "Pauper's Oath." The law states that the veteran's signature that he cannot afford to pay for private medical care for a non-service-connected disability is all that is required for his admittance into a VA hospital. It further states that his signed statement be accepted as sufficient evidence of his inability to afford private care. In other words, the VA cannot effectively investigate any veteran who signs this statement. In a recent investigation of 500 men by the General Accounting Office, there were 336 receiving free care for non-service-connected disability, all of whom, had signed the "Pauper's Oath." Of these 336 men, there were 143 with incomes of four to five thousand dollars per year; 76 with incomes of five to six thousand dollars; 49 with incomes of six to seven thousand; 62 in the seven to ten thousand bracket, and 26 with more than ten thousand dollars per year, including one of fifty thousand dollars. The GAO also found one case of a man with an income of ten thousand dollars per year who was drawing $195 per month for almost total disability.

In the September 6, 1953, edition of the Omaha World Herald, it was stated that the Omaha Veteran's Administration hospital shows a far higher percentage of non-service-connected disabilities than the national VA average. The manager of the Omaha VA hospital, said that out of 349 patients on August 31, 1953, only 46 or 13.2 per cent were veterans with service ailments. The remaining 303 or 86.8 per cent were veterans with non-service ailments. Compared to the national average for VA hospitals of 47.6 per cent with service-connected disabilities and 52.4 per cent with non-service-connected disabilities, Omaha is, indeed, considerably higher.

Because of pressure being brought to bear by service organizations and others with a political axe to grind, facts and figures of the danger to all the American people with the present Veterans Administration set-up are being obscured. Professional "flag-wavers" and honestly misguided individuals who have not learned the facts, are confusing loyalty to the men who faithfully served their country and are entitled to government medical care with the true issue that over 40 per cent of the patients in Veterans Hospitals today are those with non-service-connected disabilities, many of whom signed a fraudulent statement to gain admittance.

It is the duty of every citizen to serve his country in whatever way he is called upon to do so. And it should again be stressed that the men injured in performing this duty should be given their full measure of care by the government. But it is not the duty of every taxpayer to be compelled to overburden himself in order to care for the person who can well care for himself; nor is it the duty of every taxpayer to care for the person who is suffering from an illness that he would have had even had he not been in the service.

The facts are here. The figures do not lie. We are over-burdening the individual

(Continued on page 382)

The Significance of Multiple Injuries in Relation to the Surgery of Trauma*

CARLETON MATHEWSON, JR., M.D.

From the Stanford University Surgical Service of the San Francisco Hospital
Department of Pubilc Health
San Francisco, California

This author discusses severe injuries from whatever causes. He emphasizes the proper handling of the injured person from the first moment after the accident to the institution of definitive treatment. His main theme is the detection of the concealed, serious injury, that may be readily overlooked in the presence of obvious lesions such as fractures, lacerations, etc. Doctor Mathewson insists on a primary "base-line" established by a recorded history and physical findings, and decries any waste of valuable time or possible increase in shock through employment of unnecessary examinations.

EDITOR

Each year the American public pays a frightful price in lives, pain, and cash for accidents which appear to be part and parcel of the technicological development of this country. The increase in power and speed of machinery, and working at great heights and depths, have brought with them an increase in the magnitude of injuries, both in gravity and multiplicity. The National Safety Council added up the bill this way for 1952: killed — 96,000; injured — 9,700,000; cost — 8,300,000,000 dollars.

The magnitude of this problem can be realized only when we appreciate the fact that the accidental death toll on the home front, in 1952, was four times as great as the toll of American dead on the Korean battlefields since the onset of the Korean conflict. The number-one killer in the United States is the motor vehicle, and apparently that is here to stay. Many agencies have been set up throughout the country in a sincere effort to cut down the appalling number of automobile accidents, but, regardless of these efforts, the traffic death toll in the past year has increased in twenty-seven of the forty-eight states.

The responsibility for the prevention of accidents falls upon the physician as it does on every other citizen, but the full responsibility for the care of the injured is his. The implications of this responsibility are very great. Two hundred thousand physicians cannot be present and direct the early management and transportation of the ten million accidental injuries that occur annually; however, the profession should accept the responsibility of directing those who are present and who do undertake the first-aid-care, and transportation. Correct first-aid-management and correct transportation frequently will save the life of the severely injured, and may prevent serious and prolonged disability in the less severely injured.

When one reviews the causes of death and of prolonged permanent disability following accidental injuries, it becomes apparent at once that multiplicity of injuries is a prime factor. Accidents occurring on the highways, and in industry, frequently are associated with such violence that they result in immediate death. The human being cannot stand unlimited trauma, therefore these deaths can be prevented only by a concerted effort on the part of all citizens to prevent the accidents that cause them. On the other hand, our knowledge of the proper management of the complications of multiple severe injuries has improved, particularly since World War II, to the point that many of the severely injured can be saved and restored to normal living if they are properly managed from the moment of injury. It is impractical and often inadvisable to lay down rules to cover the management of all extensively injured patients. It is important to emphasize certain general principles to guide us from superimposing additional trauma when it cannot be tolerated or from delaying reparative surgery until the progress of hemorrhage or of infection becomes more than the body can withstand.

Too frequently the fate of the victim of an accident is determined at the scene of the accident. A major problem is that of teaching the public that the severely wounded should not be transported by untrained persons unless this is unavoidable. For some unknown reason there seems to be an uncontrollable desire on the part of "well-doers," at the scene of most accidents, to move the victim, sometimes only a few feet; but he must be moved. Unfortunately, often at that moment, a simple fracture is compounded, a large vessel lacerated, a nerve damaged, a lung punctured, or even a spinal cord crushed beyond repair. It is seldom necessary to move an injured person before an ambulance and trained personnel have arrived.

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*Read at Annual Session Nebraska State Medical Asscoiation, Omaha, May 12, 1953.

Ambulances rarely are manned with doctors. There is little reason that they should be, provided they are operated by trained personnel. Realizing the grave dangers inherent in the handling and transporting of severely injured persons, the medical profession in each community should take the lead in insisting that ambulance crews of all types have at least the minimum training of the Red Cross First Aid Course. The minimal amount of training may mean, to the severely injured, the difference between life with return to employment, and permanent disability or death. If speed of transportation and the traditional siren are the first considerations, many useful citizens will be lost to future employment.

When first seen, the victim of severe trauma may not appear to be badly injured. The gross external signs of injury may be completely lacking. When the mechanism of trauma has been such that it would seem that severe injury should have occurred, it is important, therefore, that the victim be handled as if this were the case, at least until that time when he can be examined carefully by one competent to do so. An injured person must be protected at all costs from further trauma. A history taken at the scene of an accident may consume time, but may save a life. There are not many instances when speed of transportation from the site of injury to a hospital will make an appreciable difference in the outcome to the victim of an accident. On the contrary, the impatience of a bystander may lead to improper first aid and transportation, resulting in serious consequences. An unparalyzed patient with an injury to the spine may be, and often is, converted into a completely and permanently paralyzed person, merely by the method used in first lifting him from the ground. If the great bulk of the population are to use automobiles, then they all should know the danger of allowing the victim of an acute spinal injury to even assume the sitting position. The simple maneuver of lifting a head to give a drink of water has severed the spinal cord. Certainly, it is inexcusable for an ambulance crew to be unaware of the safe method of transporting possible spinal injuries.

Splinting of fractures at the site of an accident may lessen the amount of shock, in the person with multiple injuries, just enough to turn the tide and assure a live instead of a dead patient, later. Here again we are confronted with the friendly bystander who, mainly for esthetic reasons, cannot resist the temptation to straighten out an obviously grossly distorted limb, resulting too frequently in a badly contaminated compound fracture or possibly an injured vessel or nerve.

The application of a tourniquet rarely is necessary, but often is undertaken, usually incorrectly, frequently leading to excessive venous oozing. This may be sufficient to jeopardize recovery in the patient with multiple injuries. Ischemic palsy in an extremity may result from the improper use of a tourniquet.

Evaluation of the extent of injury and the establishment of a base line for eventual reevaluation and treatment should be the prime objectives of the physician unto whose care the injured person is delivered. A rapid and complete physical examination with a record of the findings is imperative to the eventual welfare of the patient with multiple injuries. Certain evidences of trauma are obvious to the most casual observer; however, much more serious injury may remain undetected and therefore must be kept in mind and searched for if serious errors are to be avoided. This is true particularly in the unconscious, semiconscious or stuporous patient. Unfortunately serious multiple injuries occur frequently in alcoholic individuals. The state of alcoholism has a profound effect, not only upon the ease of examination, but upon the interpretation of the findings.

The importance of establishing an initial baseline cannot be over-emphasized. Changes in signs and symptoms from hour to hour often are the key to correct diagnosis so that recorded negative findings which have changed, subsequently, to positive findings become of paramount importance. This is true particularly of head injuries and intra-abdominal injuries. One learns by experience that certain types of multiple injuries are associated one with another or are caused by certain known mechanisms of injury. For example, the patient who has fallen from a great height, sustaining fractures of the os calcis, is apt to have associated fractures of the spine and base of the skull; the crushed pelvis frequently causes an injury to the posterior urethra; crush injuries to the chest may be associated with a ruptured spleen or a diaphragmatic hernia; penetrating wounds of the chest may involve not only the thoracic contents, but also the abdominal contents, and vice versa. Recognizing these and other commonly associated injuries, the wise surgeon is on his guard against them.

Asphyxia, severe hemorrhage, and shock must be recognized early and treated immediately. An open airway can be established by simple manipulation of the tongue and mandible, particularly in the unconscious patient. Simple suction applied to the upper airways may clear them sufficiently of blood and mucus to reestablish a normal exchange of oxygen; however, tracheotomy, if established early, may prove to be a life-saving procedure. Efficient suction and the administration of oxygen are accomplished much more easily through a tracheotomy tube than through a partially blocked nasopharynx.

Gross hemorrhage from accessible surface wounds can be handled simply, in the emergency room, by the application of clamps and ties on grossly bleeding vessels. Proper fitting pressure dressings will control oozing. All tourniquets should be removed and hemorrhage controlled by direct attack as soon as the patient reaches a hospital. Loss of blood in the severely wounded patient with multiple injuries usually leads to grave consequences. Concealed hemorrhage into the thorax, abdomen, retroperitoneal tissue, or even into the soft tissue of an extremity, may be sufficient to cause death, and therefore must be recognized and treated early. Hemorrhage without external evidence of its source frequently presents one of the most difficult diagnostic problems in the whole field of the surgery of trauma. Blood replacement therapy must be started at once and if the patient does not respond, or relapses into the symptoms of hemorrhage when replacement is stopped, concealed hemorrhage must be suspected and searched for until found. Continuing massive hemorrhage inevitably will lead to death. For this reason it often is necessary to undertake heroic methods to control massive bleeding.

Shock, of greater or lesser degree, almost invariably accompanies multiple injuries. The treatment must be prompt and vigorous in order to be effective. Complacency has no place in the treatment of shock. It is essential to correct the oligemia and to treat the causative wound as well. Whole blood, in most cases, is the ideal fluid for correcting the deficiency in the circulating blood volume because it is the only fluid which can also correct the red blood cell deficit. Plasma, or one of the macromolecular plasma osmotic substitutes, may be used to start correcting oligemia while awaiting the availability of whole blood. One must continue blood replacement only until the patient can maintain satisfactory systolic pressure without overactivity of the sympathicoadrenal system. Attention can be directed to the treatment of injuries when the blood pressure has surpassed 80 mm. mercury, systolic, the pulse rate falls, warmth and color return to the skin, and thirst abates. Replacement of blood should continue during and after surgery.

A painstaking history and a careful physical examination are all-important when dealing with multiple injuries. The mechanism of injury often is the clew to concealed trauma and the careful physical examination the only means of revealing it. Unfortunately, obvious injuries, particularly of the head and extremities, draw attention away from more serious spinal, intra-abdominal and intrathoracic trauma. Superficial lacerations, fractures of the extremities with deformity, and head injuries usually are obvious evidences of trauma that attract immediate attention and, too frequently, are investigated with unimportant roentgenological and laboratory studies to the detriment of the patient, while serious internal injuries go undetected.

The method of examination of the extensively injured is of great importance. It must be gentle and without undue exposure if shock is to be avoided. Movement from the guerney to the x-ray table and back again, or on and off the operating room table, may precipitate profound shock and cause the death of the patient. The decision as to whether or not x-ray examination is essential often is an all-important one. It is far better to treat a patient without the aid of roentgenological examination than to be forced to delay necessary therapy because of shock induced by the manipulation incident to such examination.

X-rays revealing a fractured skull, fractured ribs, or even most fractures of the extremities, are unimportant in the initial treatment of the severely injured person. Films absolutely essential to the early management usually can be taken safely with portable apparatus, in the emergency room, without moving the patient.

The decision must be made early as to what operative procedures are to be undertaken, and when. Open wounds of the chest must be closed immediately, severe hemorrhage must be stopped, and penetrating wounds of the abdomen must be explored early. With these few exceptions, there is seldom the necessity to rush an injured patient to surgery. On the other hand, it is important to remember that an appreciable number will require formal surgical measures as an integral part of the resuscitation. Unwarranted delay in the definite treatment of wounds, particularly where infection plays a role, is unjustified.

Beyond first aid measures, which include the immediate control of asphyxia and hemorrhage, the management of shock, and the temporary splinting of fractures, the surgeon must turn his attention to specific injuries, and their immediate and ultimate treatment.

Generally speaking, thoracic trauma may require early priority in treatment since serious disturbances in cardiorespiratory physiology, may produce rapid deterioration. Retention of bronchial secretions, sucking wounds of the chest wall, pressure pneumothorax, massive bleeding into the pleura, and cardiac tamponade, all may lead to profound changes in cardiorespiratory physiology requiring immediate treatment. Patients with associated injuries of other organs or parts, which may require early surgery, usually have a better chance for recovery if the thoracic injuries are treated before the other operative procedures are undertaken. When combined thoraco-abdominal injuries requiring operation are encountered, the thoracic portion of the procedure usually is undertaken first, in an attempt to restore normal cardiovascular physiology.

The most difficult problems in diagnosis in relationship to multiple injuries arise in connection with injuries to the abdomen. Both blunt and penetrating types of trauma present a challenge to the most astute diagnostician, mainly because of the many organs involved, but also because the early symptoms are so frequently overshadowed by other associated injuries to the head, chest, and extremities. As a general rule it can be stated that all penetrating wounds must be explored as soon as the patient's general condition permits. It is rarely possible to establish, positively, that a penetrating wound from any type of instrument has not caused serious internal injury, unless exploration be undertaken. On the other hand, blunt injuries to the abdomen present an entirely different problem, but occasionally do cause serious intra-abdominal and retroperitoneal damage. Ruptured spleen, ruptured bladder, lacerations of the liver and bowel, and injuries to the pancreas all must be considered as consequences of blows on the lower chest and on the abdomen. Lacerations of the kidneys, and serious retroperitoneal hemorrhage, the latter particularly in relation to injuries of the spine, present difficult diagnostic as well as therapeutic problems.

The multiplicity of severe wounds may mask the detection of a urological wound; therefore, an awareness of its possibility on the part of the attending surgeon is essential. A urine specimen should be obtained promptly in all seriously injured persons. The presence of blood in the urine indicates injury to some level of the urinary tract. The degree of hematuria, however, is not necessarily indicative of the extent of damage. Occasionally hematuria is completely absent in injuries to the ureters. Although most injuries to the kidney may be treated conservatively, ruptures of the ureters, bladder, or urethra require initial repair and early diversion of the urine in order to prevent extravasation and subsequent infection. For these reasons early recognition of these injuries is essential.

Major injuries of the extremities, such as fractures, simple and compound, dislocations, contusions, lacerations, and avulsions are seldom overlooked. These are the common types of trauma resulting from present day accidents. Open wounds of all types require early and thorough debridement in order to prevent the ravages of infection; however, because they are common and usually not easily overlooked, they must not distract the surgeon's attention from other more remote and less obvious serious injuries.

A fairly high percentage of severely injured patients are suffering with a head injury of greater or lesser degree. Here, as in the profoundly alcoholic casualty, the examination and its interpretation are altered by the state of consciousness. The unconscious state will mask symptoms and thus delay the early management of injuries otherwise amenable to early recognition and treatment. The great importance of a careful neurological examination cannot be overemphasized.

A recorded baseline in this type of inquiry is of paramount importance since hourly changes in the state of consciousness, and in neurological findings, may be the only clews to the extent and progress of a brain injury. Perhaps the most important single lesson to remember is that unless the patient's condition is deteriorating very rapidly as regards the head injury, it seldom is necessary to hurry him into an emergency operation. A period of delay, permitting adequate resuscitation, is tolerated well even when one is dealing with compound brain injury, or depressed fractures. Craniotomy for the detection and relief of intracranial hemorrhage is seldom required as an emergency procedure.

Peripheral nerve injuries and injuries to the spinal cord are common in the patient who has undergone severe trauma. These frequently are overlooked during the early management of the patient with multiple injuries. Post-traumatic paralysis having its origin in the spinal cord, which is both immediate and complete, seldom recovers much useful function; however, good recovery occasionally is seen under these circumstances, and many paralyses are partial and quite capable of improvement. It is important, therefore, that the true nature and extent of these injuries be evaluated early and that every possible precaution be taken to prevent further trauma. Laminectomy with exposure of the cord is warranted to relieve pressure by clot, foreign body, or displaced bone, and, in open wounds, to establish proper wound toilette to encourage primary healing. Associated wounds of the chest and abdomen may necessitate delay in the laminectomy; however, the earlier functional tissue is decompressed, the more likely it is to function again.

Peripheral nerve injury should be sought in all wounds of the extremities. Simple tests are available for both upper and lower extremities and should be carried out in all cases. Treatment of fractured extremities without the recognition of associated nerve injuries will lead to serious disability, to say nothing of the medico-legal implications.

Injuries of the extremities, including lacerations, contusions, abrasions, dislocations, fractures both simple and compound, burns, avulsions of skin, crush wounds, etc., comprise the great majority of injuries both in civilian and military life. Most of these, when seen alone, do not present a serious problem; but when encountered in combinations or in association with trauma elsewhere in the body, create major surgical problems. An open reduction and internal fixation of a fracture may be advisable when this is the only injury, whereas in multiple injuries it may be contraindicated from the point of view of both infection and shock. Thorough debridement of open wounds, reduction and immobilization of fractures and dislocations, early amputation of devitalized parts, the closure of wounds by grafting or suture, nerve suture, the grafting or suture of major blood vessels, and other specialized surgical techniques, all play a major role in the rehabilitation of the extensively injured person; however, first things must come first when dealing with multiple injuries, and unless laymen, first aid men, orderlies, nurses, technicians, doctors, and all others concerned with their management exercise excellent judgement from the time of the injury until definitive treatment has been completed, the morbidity and mortality will continue to be extraordinarily high.

Looking to the future, one can anticipate little change in the incidence of violent trauma both at home and on the field of battle, wherever that may be. One need look only into the recent past in Europe and to the present in Asia, to say nothing of our own highways and byways, to recognize an immediate scope of action where human destruction is at its peak. What the future holds, no man can say. With the introduction of atomic weapons, supersonic planes, guided missles, and radar controlled guns, the possibilities for more widespread human destruction seem unlimited. One thing is clear, and that is the responsibility of the doctor to the injured. Wherever we go, they will be there; let us not shirk our duty.

THE HAZARDS IN BICYCLING

Bicycle accidents take approximately 600 lives a year in the United States. About two thirds of the fatal injuries occur in the months from May to October, when the weather is most favorable for outdoor recreational activities. Nine out of every 10 deaths are among males; boys at ages 5 to 19 years constitute 70 per cent of all the victims in both sexes. Collision with a motor vehicle is by far the greatest bicycle hazard, being responsible for at least four fifths of the fatalities. The remaining proportion is due mainly to falls from bicycles, running into fixed objects, collision with railroad trains at crossings, and fatalities among pedestrains who are run down or collide with cyclists.—(From Statistical Bulletin Metropolitan Life Insurance Co. April, 1953.

The Surgical Treatment of Pancreatic Disorders*

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DISORDERS RELATED TO MALDEVELOPMENT OF THE PANCREAS

ANNULAR PANCREAS

Annular pancreas is rather an anatomic curiosity. Essentially, it is a developmental anomaly of the ventral anlage of the pancreas in which this structure fails to fuse with the larger dorsal anlage. Instead, it develops independently and comes to surround the descending duodenum as a circular and, at times, constricting band.

In the surgical cases reported in the literature, treatment consisted of either a short-circuiting operation in the form of gastroenterostomy, or of more direct relief of the obstruction by the division or resection of the band itself. The latter is preferable since the disturbance is a benign, mechanical one, and it seems logical that it should respond to any method which successfully relieves the obstruction.

PANCREATIC HETEROTOPIA

Pancreatic heterotopia is the presence of pancreatic tissue outside its usual or habitual site and without anatomic relation either of continuity or of vascularization with the pancreas proper.

In a complete review of the literature by Barbosa, Dockerty, and myself, it was found that up to 1944 approximately 430 cases of this condition had been reported. To these were added 41 authenticated cases from the Mayo Clinic, making a total of 471 reported to that date.

The incidence of pancreatic heterotopia at necropsy was found by Derbyshire to be 1.7 per cent in 2,785 examinations at the Mayo Clinic. It has been noted approximately once in each 500 operations on the upper portion of the abdomen at the same clinic.

There are 2 circumstances in which pancreatic heterotopia may be found at exploration: it is either causative of symptoms, or it is only an incidental finding.

When pancreatic heterotopia is situated in the stomach or duodenum, simple local excision, when feasible, is sufficient to bring about relief of symptoms. At times, careful duodenal reconstruction or pyloroplasty may have to be performed. It would be difficult to tell by palpation the nature of the lesion, and in cases of gastric lesions the result of biopsy is at best frequently indeterminate. Therefore, by and large, with carcinoma so common in the stomach and pancreatic heterotopia so uncommon, it would be to the patient's best interest to elect gastric resection. Frequently, one of the modifications of the Billroth I operation is possible and indicated when the lesion is found in the lower third of the stomach. In case of higher lesions, a Polya operation or one of its modifications would be suitable.

The operative procedure advised for pancreatic heterotopia in sites other than the stomach and duodenum is complete, but simple, extirpation, but generalizations cannot be made, so varied are the sites of involvement. Jejunal pancreatic heterotopia, found incidentally during the course of an operation for some other condition, may be left undisturbed with a fair chance that complications will not be observed subsequently. The same general rule would hold true for pancreatic heterotopia in other sites, although surgical judgement might vary.

ACUTE PANCREATITIS

The majority of surgeons interested in acute pancreatitis and its treatment seem to favor conservative management. Such management has, in the majority of instances, halved the number of deaths which have occurred when operation has been performed during the height of an attack.

In the acute edematous form, conservative measures are the usual practice until the acute phase is over and the concentration of serum amylase approaches normal. Exploration of the biliary tract and pancreas then is undertaken. This is usually done seven to ten days after the acute attack. If the gallbladder is diseased or contains stones, cholecystectomy is performed. The common bile duct is opened and carefully explored, and prolonged drainage by means of a T tube is instituted. In mild forms of the disease, drainage should be continued for three months, but in severe forms, six months to one year is preferable. Because of the unavoidable manipulation, a flare-up may result, and it is well to use penicillin and streptomycin prophylactically for five days after operation.

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In cases of acute hemorrhagic pancreatitis with or without gangrene or necrosis, it seems advisable to delay surgical interference so that should either an abscess or a pseudocyst appear it could be drained immediately. From the pathologic standpoint, the process is irreversible, and efforts should be directed toward the rehabilitation of the patient and treatment of the sequelae of the destructive process in the pancreas.

Fluids and electrolytes should be administered intravenously as needed. Transfusions of whole blood and administration of penicillin and streptomycin will tend to relieve shock and to combat any associated infection. Edmondson and Berne have shown that there is an appreciable loss of serum calcium secondary to the loss of calcium in the areas of fat necrosis. They demonstrated that a concentration of less than 7.7 mg. of calcium per 100 cc. of serum almost always indicates a fatal outcome. Gambill and his associates reported a fatal outcome in a case in which the value for the serum calcium fell to 5.5 mg. per 100 cc. To replace this loss of calcium, it is necessary to administer calcium (calcium lactate) by mouth if the patient is not vomiting, or to administer calcium gluconate intravenously if the patient is unable to take the former. Gage and Floyd have been strong advocates of splanchnic block for acute pancreatitis. They said, "Bilateral splanchnic block immediately relieves pain, overcomes all spasm of the ductal system and vascular tree and, therefore, inhibits the progress of the disease by emptying the gallbladder, bile and pancreatic ductal systems of the toxic fluids into the duodenum, promotes rapid subsidence of the edema and absorption of the inflammatory products and recovery of the patient. Several splanchnic blocks may be necessary in the severe cases." Gastric suction and the administration of banthine (beta-diethylaminoethyl xanthene-9-carboxylate) or atropine to reduce the flow of pancreatic juice are definitely helpful.

RELAPSING PANCREATITIS

Effective medical treatment for relapsing pancreatitis is unknown. Alcohol and large meals seem definitely to provoke attacks in certain cases, and for this reason should be avoided. In acute attacks, control of the pain usually will require the use of morphine and other measures outlined previously. Diabetes should be looked for with each acute attack and at regular intervals between attacks so that the patient may be treated properly if it appears as a complication. Pancreatic steatorrhea usually can be controlled fairly well by restricting the intake of fat and by the use of pancreatin.

There are numerous indications for surgical treatment of relapsing pancreatitis, and it offers greater relief than medical treatment. Drainage can be used if pseudocysts or abscesses are present; posterior gastroenterostomy, if there is obstruction of the duodenum; cholecystogastrostomy, cholecystectomy, choledochostomy or choledochoduodenostomy, as the situation may indicate. If exploration discloses cholecystitis with stones, or even a stone in the common bile duct, cholecystectomy should be performed. The stones should be removed from the common bile duct, and drainage should be started by means of a T tube in the common bile duct. This drainage should be continued for from nine months to a year. Usually, this type of pancreatitis is associated with disease of the gallbladder and will subside with prolonged drainage by means of a T tube. If the common bile duct is obstructed in the region of the head of the pancreas, owing to the pancreatitis, some sidetracking operation such as choledochoduodenostomy will be necessary to relieve the jaundice. If, on the other hand, there is no visible or palpable disease of the gallbladder or bile ducts, it is questionable whether it is advisable to remove the gallbladder. Good results can be expected from prolonged drainage of the common bile duct with a T tube in about 50 per cent of the cases in which associated disease of the biliary tract is not present. Doubilet and Mulholland recently have reported obtaining good results in cases of relapsing pancreatitis by severance of the sphincter of Oddi. This procedure is so minor, as compared to some of the more radical operations advocated for chronic pancreatitis, that is would seem advisable to carry out such severance of the sphincter either with the Colp instrument through the common bile duct, or by means of transduodenal severance of the sphincter. The latter approach is usually more accurate.

Resection of the tail and body or of the head of the pancreas should be considered if the pathologic process is limited to this portion of the organ and if considerable calcification is present. In the past, total pancreatectomy has been performed at the Mayo Clinic in cases in which diffuse calcification and unbearable pain have been present, but the late postoperative course of the patients has been such that formidable procedures of this type can no longer be recommended. Richman and Colp have suggested subtotal gastrectomy and vagotomy as treatment for chronic relapsing pancreatitis and have presented physiologic data which would suggest a fairly sound basis for this operative procedure. As yet, it has been used in only a limited number of cases, but it is worthy of further trial and has probably more to recommend it than does the next procedure to be mentioned, namely, splanchnicectomy.

In recent years, there has been much enthusiasm for splanchnicectomy to relieve the pain which frequently accompanies calcification of the pancreas, and possibly to relax the sphincter of Oddi. Mallet-Guy, JeanJean and Servattaz, in 1945, reported the late results of the treatment of chronic pancreatitis by unilateral splanchnicectomy, and, after their report in this country, Rienhoff and Baker, deTakats, Walter and Lasner, Grimson, Hesser and Kitchen, Gage and Floyd, McDonough and Heffernon, Connolly and Richards as well as Smithwick all reported that this operation relieved the pain caused by this distressing disorder. It is my feeling and that of my colleagues that thorocolumbar sympathectomy should be resorted to only when more conservative measures have failed and if the patient continues to have disabling pain. Our results with the procedure have been, for the most part, discouraging. We have not obtained the uniformly good results which have been reported by other observers.

PANCREATIC CYSTS

Total excision of the cyst is the treatment of choice in any case of cyst of the pancreas. As much of the normal pancreas should be preserved as possible. If it is impossible to preserve any of the pancreas, or if the operative risk is great, partial excision with marsupialization, or the latter alone, can be substituted. Internal drainage has been advocated, but has been used only rarely at the clinic because marsupialization has proved very satisfactory.

Thigpen made a study of 55 cases of pancreatic cyst which were observed at the clinic. In 18 (32.7 per cent) of the 55 cases, the cyst or cysts apparently were excised completely. This certainly is the treatment of choice. If it is believed that the cyst may be malignant, or if it is found to be a cystadenoma, excision of the cyst or resection of the pancreas offers the only hope of cure. In 11 (19.9 per cent) of the 55 cases studied by Thipgen, the cyst was a cystadenoma, and in 4 (36.3 per cent) of the 11 cases it was a cystadenocarcinoma.

Because pseudocysts do not have an epithelial lining, they will respond to external drainage more often than will true cysts. In 24 of the 55 cases studied by Thigpen, the cyst was a pseudocyst; in the remaining 31 cases, it was a true cyst. The cyst was excised completely in only 4 (16.6 per cent) of the 24 cases of pseudocyst. In the remaining 20 cases of pseudocyst, drainage was employed with or without marsupialization. The cyst was partially excised in 7 of these 20 cases. The cyst was excised completely in 14 (45.1 per cent) of the 31 cases of true cyst. Drainage with or without marsupialization was employed in 14 of the remaining 17 cases. Partial excision of the cyst was performed in 10 of the 17 cases.

The incision will vary with the position of the cysts, and should be made over the most prominent part of the cyst. An upper midtransverse incision can be enlarged either to the right or to the left as found advisable, and is usually most satisfactory.

The operative mortality rate for removal of pancreatic cysts and marsupialization and drainage is low. In 1921 Judd and associates reported 46 cases in which one of these operative procedures was employed and he found no difference in mortality between total excision and marsupialization and drainage. In collected series of cases, the mortality rate has averaged about 10 per cent, but at the time of this writing it should not be more than 2 to 3 per cent. Recurrence is uncommon after excision, and only 3 recurrences were mentioned in a series of 135 cases reported by Schmieden and Sebening.

After excision, soft Penrose drains should be inserted down to the pancreas to evacuate any pancreatic juice or collection of serum. If marsupialization is to be performed, the cysts should be evacuated and explored to rule out the possible presence of a milignant lesion. I know of 2 cases in which a hopeless malignant lesion apparently developed in a pancreatic cyst which had been treated by drainage and marsupialization because it had been considered benign.

The wall of the cyst should be sutured to the skin so as to leave an opening at least 1 inch (about 2.5 cm.) in diameter. The cystic cavity should be packed with gauze until the cavity disappears, or, if it persists, a dePezzer catheter may be substituted and left in place several months to facilitate drainage and thus prevent the cyst from refilling. The use of sclerosing solutions in a cystic cavity is hazardous and should be avoided.

Should a pancreatic fistula result, or if the cyst does not become obliterated after marsupialization or drainage, internal drainage may be established by way of the stomach or, preferably, the jejunum. Jejunojejunostomy can be performed below the transplanted cyst or fistula to isolate the loop of intestine and diminish the likelihood of infection.

Because of jaundice which resulted from a cyst in the head of the pancreas that could not be excised but was drained, choledochoduodenostomy has been performed in 2 cases which have been observed at the clinic.

CARCINOMA OF THE PANCREAS

Palliative Operations — If surgical measures are not employed, the majority of patients with carcinoma in the region of the papilla of Vater will die within six months after the onset of symptoms. Death results primarily from complications associated with the chronic biliary obstruction. For this reason, palliative operations were devised in an attempt to provide internal or external biliary fistulas to relieve the jaundice. There are advocates of each of the several methods of performing biliary shunts, including cholecystostomy, cholecystogastrostomy, cholecystojejunostomy and choledochojejunostomy. The operative mortality rate for palliative operations for neoplastic biliary obstruction varies greatly. In most of the series of reported cases, it has ranged from 15 to 35 per cent. The average mortality rate in some series of cases has been about 18 per cent. Since 1939, there has been a marked fall in the mortality rate, probably because of the general preoperative and postoperative use of vitamin K.

According to Hunt and Budd, 30 per cent of the deaths after palliative operations were caused by hemorrhage. In several series of cases the average duration of life of patients with cancer of the pancreas on whom palliative operations had been performed was six months. Fraser said that 90 per cent of the patients who survive palliative operation die within a year. The average survival time of patients with carcinoma of the papilla of Vater after palliative operations is about twice that of those with carcinoma of the pancreas, which is approximately thirteen months.

Choledochoduodenostomy and Gastro-enterostomy — Exploration sometimes reveals that a curative operation such as pancreatoduodenectomy cannot be carried out because of local spread or distant metastasis. In such instances, one of the most direct approaches to relief of jaundice is by means of choledochoduodenostomy. This can be carried out readily, and produces immediate relief. Usually, two rows of interrupted silk sutures are used, and a side-to-side anastomosis is performed just above the pancreas. If the local mass is too large to permit this, the simplest method is to perform cholecystogastrostomy, which also is effective but does not produce as immediate relief of jaundice as does choledochoduodenostomy. Since pyloric or duodenal obstruction will develop in many cases in which neoplastic masses are present in the head of the pancreas near the duodenum, the advisability of performing palliative gastro-enterostomy simultaneously to preclude this possibility should be considered seriously. Occasionally, choledochojejunostomy or cholecystojejunostomy may be advisable, but because they usually necessitate entero-anastomosis below the biliary shunt to prevent obstruction they are more lengthy procedures and are, as a rule, not necessary or advisable.

Transduodenal Excision — This operation should be considered palliative, and, because its mortality rate is as great or greater than that of radical pancreatoduodenectomy, it should be abandoned. In all of the cases in which this operation has been performed at the clinic, the patients have survived for less than five years. Hunt and Budd reviewed 93 reported cases in which this operation was performed, and they found that only 5 of the 93 patients were alive four years after the operation.

Radical Pancreatoduodenectomy — A patient who has obstructive jaundice which is believed to be caused by carcinoma situated in or about the head of the pancreas deserves full consideration from the standpoint of proper and adequate preoperative preparation. Most patients can be so well prepared that the one-stage procedure is safe and advisable. It has certain advantages in that the malignant lesion is eradicated at an earlier date than in the two-stage procedure. A one-stage operation is usually easier technically, and the patient is spared the discomfort, expense, and risk of the second operation. There are certain patients, however, who are in such poor condition that a two-stage procedure is obligatory. By careful preoperative analysis, these patients can, as a rule, be recognized with little difficulty.

If the situation is found suitable for radical resection, the lower third of the stomach, the entire duodenum, the head of pancreas and the adjacent portion of the body for at least 1 inch (about 2.5 cm.) to the left of the superior mesenteric vessels, the upper 4 to 5 inches (10.16 to 12.7 cm.) of the jejunum, the common bile duct to within 1 inch of the juncture of the right and left hepatic ducts, and the surrounding lymph nodes are excised en masse. With the jejunum now occupying a position similar to that of the normal duodenum, an end-to-end anastomosis is performed between the pancreas and jejunum with two rows of interrupted silk sutures. After the anastomosis is completed, the pancreas projects into the jejunum for about 1 cm. An end-to-side anastomosis is then performed between the common bile duct and jejunum with two rows of interrupted silk sutures at a convenient point in the jejunum distal to the site of the pancreaticojejunostomy, usualy 3 to 4 inches (about 7.6 to 10.16 cm). The root of the mesentery is then closed around the jejunum to prevent internal herniation, and a postcolic end-to-side antiperistaltic gastrojejunostomy is performed to re-establish the gastrointestinal continuity. An inner row of running sutures of chromic catgut and outer row of interrupted silk sutures are utilized. A Levin tube is inserted into the proximal limb of the jejunum, and constant suction is applied.

In the last 24 consecutive cases in which radical pancreatoduodenectomy has been performed for malignant disease of the ampullary area at the clinic, only 1 patient has failed to recover from the operation. This low mortality rate certainly justifies the use of the radical operation even though it frequently produces only palliation. Cures are being reported in increasing numbers, and these also lend support to the procedure.

CARCINOMA OF THE BODY AND TAIL OF THE PANCREAS

Rarely is resection of the body and tail of the pancreas for carcinoma technically feasible because of the local extension. Exposure is obtained by dividing the gastrocolic ligament. The spleen is removed with the tail and body of the pancreas en masse to the right beyond the superior mesenteric vessels. I have been unable to find any mention in the literature of a patient who was alive and well without recurrence more than five years after resection of an unquestioned carcinoma of the body or tail of the pancreas.

TUMORS OF THE ISLETS OF LANGERHANS

Surgical exploration for islet-cell tumor should not be delayed beyond proper preparation of the patient after the diagnosis is established. Delay usually produces greater obesity and thus makes the operation more risky and technically more difficult. Delay also will permit more mental deterioration, which unfortunately is sometimes irreversible even after sucessful excision of the tumor.

The presence of hyperthyroidism should be ruled out as the incidence of this disorder associated with hyperinsulinism has been unusually high.

Preoperatively, the patient should be permitted to ingest carbohydrates up to within four hours of the time of operation; 1,000 cc. of a 5 per cent solution of dextrose should be administered slowly by the intravenous route just prior to operation, and 1,000 to 2,000 cc. should be administered in the same manner during the operation. If an attack of hyperinsulinism is suspected while the patient is under anesthesia, which would be most unusual with these precautions, rapid intravenous administration of 200 to 300 cc. of a 10 per cent solution of dextrose should abort it.

At the clinic, anesthesia is usually produced by the intratracheal administration of nitrous oxide, oxygen and ether. Spinal anesthesia has been used in some cases. An upper transverse incision will afford the best exposure of all parts of the pancreas. The presence of an islet-cell adenoma in an aberrant pancreas should first be ruled out by an examination for ectopic tissue in the wall of the stomach, the duodenum and the upper portion of the jejunum, and the vascular area between the tail of the pancreas and the spleen. About 1 per cent of tumors have been found in accessory pancreatic tissue.

Access to the body and tail of the pancreas is best obtained by severing the gastrocolic ligament for a short distance. The tumor may be of a size or in such a position as to be readily discernible, but, if it is not, the inferior border of the tail and body of the pancreas is mobilized and carefully palpated. Tissue which for any reason does not appear to be normal is carefully excised and submitted to the pathologist for immediate microscopic examination. If a tumor is not readily discernible in the tail or body, the head of the pancreas is mobilized by incising the peritoneum just lateral to the second portion of the duodenum (Kocher maneuver), and the head of the pancreas and the duodenum are brought forward and to the left so that the head of the pancreas can be carefully palpated between the thumb and fingers. Again, any tissue which appears abnormal is excised and examined microscopically. If, after a most careful search of the entire organ, a tumor is not found, the portion including the tail and body to the right of the superior mesenteric vein is removed with the spleen. Usually, by extremely careful sectioning of the removed portion, the pathologist will find a small tumor. If none is found, however, two alternatives face the surgeon: (1) to remove the head of the pancreas and the duodenum, thus making the pancreatectomy complete in one stage, or (2) to give the pathologist more time for examination of the specimen and perform total pancreatectomy in 2 stages. The latter is preferable in most instances, as the surgeon can be more certain that complete extirpation is necessary by reappearance or continuance of the symptoms.

The operative mortality rate for removal of islet-cell tumor in 50 cases in which patients were operated on at the clinic was 10 per cent. This included all types of operative procedures, from simple excision to total pancreatectomy. The postoperative results have been excellent, and there has not been any recurrence of symptoms after removal of a benign islet-cell tumor.

Howard, Moss and Rhoads found that 46 per cent of 56 patients obtained satisfactory results even though the surgeon could not find a tumor and a tumor was not found in the specimen after partial pancreatectomy was performed.

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Mass chest X-ray surveys, originally intended to detect early pulmonary tuberculosis, have also revealed that other intrathoracic lesions may be found with some degree of frequency in apparently healthy people. (Sidney E. Wolpaw, M.D., Annals of Internal Medicine, Sept., 1952.)

The Liver in Heart Disease*

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Chronic heart failure is associated with widespread and complex changes in body function, including changes in the function and structure of the liver(1-13). Precise evaluation of these hepatic changes seems important for several reasons. In the occasional patient with deranged liver function tests, edema, ascites, and hepatomegaly, the differential diagnosis of hepatic from cardiac disease may be difficult. Evaluation of the type and degree of impairment of hepatic function in patients with congestive failure may be of help in this situation. Furthermore, the recent evidence of the importance of the liver in electrolyte and water metabolism(13-16), suggests that careful study of hepatic changes in heart failure may contribute to a better understanding of mechanisms of the failure. In this discussion reference will be made to observations on apparent hepatic abnormality in association with congestive heart failure, subacute bacterial endocarditis, and myocardial infarction.

CONGESTIVE HEART FAILURE

Hepatic function is consistently impaired in cardiac failure (Table I). Most frequently abnormal is the ability to excrete foreign dyes such as bromsulfalein. In 96 per cent of 105 patients(13) with congestive heart failure the results of the bromsulfalein excretion test were abnormal, with the abnormality varying from minimal (6 per cent) to marked (more than 50 per cent) degrees of retention of dye, usually parallel to the severity of the congestive failure as estimated by venous pressure measurement or clinical criteria. Satisfactory clinical response to treatment of the congestive failure was associated with improvement in the ability to excrete bromsulfalein, while lack of improvement of hepatic function could usually be related to an unsatisfactory response of the failure to treatment.

Abnormality of other laboratory measures of hepatic function is less frequent than impaired dye excretion (Table I). Disturbance of plasma proteins as shown by hyperglobulinemia, hypoalbuminemia, and abnormality of the thymol turbidity and cephalin flocculation tests may occur in 25 to 50 per cent of patients in heart failure(10-13, 24, 28-36). Elevation of the serum alkaline phosphatase(11, 37) and urine urobilinogen(9, 22-24) is frequent. Thus the pattern of hepatic functional abnormality in congestive heart failure is characterized by a predominance of inability to excrete bromsulfalein and of abnormal urobilinogen excretion with less frequent and less marked disturbance of the flocculation tests.

Hyperbilirubinemia is common but clinical jaundice is only occasional in uncomplicated congestive heart failure(2-10). Usually the bilirubin elevation represents primarily the indirect-reacting fraction and under these circumstances there is frequently increased urobilinogen with little bilirubin in the urine(10). It has been suggested(2, 11, 18) that impairment of hepatic function, increased production of bilirubin, probably in the lungs, and decreased blood flow through the liver all contribute to this hyperbilirubinemia. The occasional jaundice of the hepatocellular variety(39) with distinct increase of "direct-reacting" serum bilirubin and with bilirubin in the urine, is probably associated with centrolobular necrosis(3). Sherlock(40), however, has suggested that hepatocellular jaundice in congestive failure may be due to regurgitation of bile without hepatic necrosis. Although frank jaundice may occur in congestive heart failure, in the absence of demonstrable pulmonary infarction, the later should be suspected in a clinically icteric patient with heart failure(10).

Several factors have been considered important in the pathogenesis of impaired hepatic function and jaundice in congestive heart failure. Mechanical compression associated with increased venous pressure has been suggested as a cause of functional impairment(41, 42) and regurgitation jaundice(40). It has been emphasized(2), however, that histologic changes incident to the mechanical effect on parenchymal cells by increased venous pressure should be at the periphery of the lobule because pressure must be higher at the periphery than at the center to maintain normal blood flow. Since the changes are usually centrolobular it would seem that more than the theory of mechanical compression must be invoked to explain these changes. As has been pointed out by Himsworth(43), however, the increased venous pressure in congestive heart failure results in an interference with blood flow through the liver and, therefore, progressive hypoxia as the center of the lobule is approached. That blood flow to and through the liver is decreased in congestive heart failure has been shown by Myers and Hickam(44). Evans and his associates(13) could not relate impaired liver function to peripheral arterial oxygen desaturation, but in a few patients they demonstrated significant reduction in the oxygen saturation of blood from the hepatic vein. It seems probable that the effect on the liver of peripheral arterial oxygen unsaturation is augmented by further oxygen unsaturation of the blood of the hepatic artery or portal vein. To this is added the factor of marked decrease in blood flow through the liver secondary to the increased venous pressure. Malnutrition due to impaired intake or absorption of nutrients may also contribute to the genesis of impaired liver function(11) although no such important role of nutritional status has been clearly demonstrated.

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TABLE I
INCIDENCE OF ABNORMALITY OF HEPATIC FUNCTION IN CONGESTIVE HEART FAILURE

Hepatic Function Test	Incidence of Abnormality	Ref.	Comment
Serum Bilirubin Elevation	37-84%	2-5, 9-13, 17-21	May be as high as 13 mg.% Clinical jaundice more common when heart failure complicated by pulmonary infarction(2, 10, 19).
Urine urobilinogen excretion	60-100%	9, 22-24	May be markedly increased.
Bromsulfalein excretion	75-96%	5, 7-13, 25-27	Impairment is probably resultant of impaired delivery of dye to liver and of actual impaired parenchymal function.
Protein Tests			
Hypoalbuminemia	26-52%	10-13, 24, 28-36	Marked abnormality associated with poor prognosis(10).
Hyperglobulinemia	18-59%		
Thymol turbidity	36-50%		
Cephalin flocculation	22-27%		
Alkaline Phosphatase	46-70%	11, 37	Usually moderate elevation.
Cholesterol metabolism	no consistent alteration	11	Variable results in part related to type of heart disease studied.
Prothrombin concentration	16-50%	12, 61-63	Prothrombin concentration and dicumarol tolerance reduced.
Carbohydrate tolerance (levulose galactose)	18-67%	5, 8, 11, 39	Mild impairment

Histologic changes which have been ascribed to congestive heart failure include necrosis of the cells around the central vein, fibrosis around the central vein, and cardiac

TABLE II
FEATURES OF AID IN DISTINGUISHING HEPATOMEGALY OF CONGESTIVE HEART FAILURE FROM LAENNEC'S CIRRHOSIS

Clinical	Congestive Heart Failure with Hepatomegaly	Laennec's Cirrhosis
Dyspnea	Frequent	Occasional
Ascites	Occasional	Frequent
Edema (dependent)	Frequent	Occasional
RUQ pain	Frequent and occasionally severe	Frequent but mild
RUQ tenderness	Frequent, may be marked	Occasional, mild
Hepatic pulsations	Infrequent but diagnostic when present	Absent
Hepato-jugular reflux	Very frequent, diagnostic when present	Absent
Venous pressure	Increased	Normal
Laboratory		
1. Pattern of abnormal hepatic function	Dye excretion disproportionately marked and frequently with less marked and frequent abnormality of protein and flocculation tests.	Dye excretion and protein abnormality (especially cephalin flocculation) usually more proportionately deranged.
2. Response to treatment	Sharp and prompt improvement of dye excretion when heart failure responds to treatment.	Slow and gradual improvement with bed rest and dietary treatment for liver disease.

cirrhosis(1, 2, 10, 12, 20, 41, 42, 43). Centrolobular fibrosis in the livers of patients with congestive heart failure is agreed upon by most investigators(2, 10, 16-53). While central necrosis has been commonly ascribed to congestive heart failure, it has recently been suggested(45) that, in most patients having congestive failure, central necrosis is the result of shock during their terminal illness. Nevertheless, the consistent site of the histologic changes noted in congestive heart failure is the area around the central vein.

Ordinarily the clinical features of hepatic engorgement (Table II) are overshadowed by the other signs and symptoms of congestive failure. At times, however, right upper quadrant pain and jaundice, or ascites, may suggest the presence of intrinsic hepatic disease. Severe pain is especially prone to occur when engorgement has developed rapidly, and under such circumstances acute cholecystitis may be simulated. Generally the pain is dull and described as a "soreness" or "ache."

The liver is usually easily palpable and distinctly tender, an important differential feature from the hepatomegaly of intrinsic liver disease. Demonstration of hepatojugular reflux is strong evidence for congestive hepatomegaly(2, 10). Hyperbilirubinemia is common, but clinical jaundice less frequent, occurring in 5 to 10 per cent of patients with congestive failure(2, 10). It has been emphasized(2, 10) that when clinical jaundice is noted in patients with heart failure, it is strongly suggestive of pulmonary infarction. Nevertheless, jaundice may occur in the patient with heart failure without pulmonary infarction. The pattern of laboratory dysfunction in hepatic congestion characterized by a marked disproportion between dye excretion and flocculation test abnormality is infrequently seen in intrinsic hepatic disease.

CARDIAC CIRRHOSIS

The term "cardiac cirrhosis" has been venerated by long usage, but the concept that cardiac failure can lead to true cirrhosis is still a subject of controversy(2, 46). There is general agreement, however, that chronic passive congestion can lead to hepatic fibrosis(2). It has been emphasized that this fibrosis is centrolobular and rarely extends to the periphery of the lobule(2). According to Katzin and his associates (47), periportal fibrosis also may occur as a result of congestive heart failure, although rarely, and thus produce a true diffuse cirrhosis.

The incidence of "cardiac cirrhosis" in various studies(2b, 10, 12, 20, 46-53) has ranged from 0.2 per cent in the series of Kugel and Lichtman (48) to 10 per cent in the recent study of Kotin and Hall(46). Rheumatic heart disease, constrictive pericarditis, and hypertensive heart disease(46) are the cardiac lesions most frequently associated with increased hepatic fibrosis. Kotin and Hall found a surprising lack of correlation between the degree of hepatic fibrosis and the duration of failure, but, a positive correlation with the number of recurrent bouts of decompensation.

Felder, Mund and Parker(11) found a higher degree of abnormality of hepatic function in 14 patients with "proven cardiac cirrhosis" than in other patients in congestive failure, but they noted no helpful difference in the patterns of abnormality.

Boland and Willins(20) have recognized that there are no reliable clinical or laboratory criteria for the diagnosis of cardiac cirrhosis. It may be suspected, however, in a patient with chronic congestive failure due to rheumatic or hypertensive heart disease or to constrictive pericarditis, when there is (a) a history of repeated bouts of decompensation, (b) recurring or persisting ascites, (c) splenomegaly, (d) chronic jaundice, (e) failure of the clinical and laboratory evidence of hepatic abnormality to improve with restoration of compensation(54).

SUBACUTE BACTERIAL ENDOCARDITIS

Abnormality of flocculation tests of hepatic function has been described in a number of diseases not primarily involving the liver(24, 35, 36), including subacute bacterial endocarditis. Carter and Maclagan(24) considered the frequent abnormality of the thymol turbidity test in patients with the latter disease an evidence of abnormal hepatic function. The author(54) has also found frequent (70 per cent) abnormality of the thymol turbidity and cephalin flocculation tests in subacute bacterial endocarditis. Dye excretion, however, was essentially intact in most of the patients, and when abnormal, usually associated with congestive heart failure. Subacute bacterial endocarditis is frequently associated with elevation of the serum globulin(55), perhaps as an immunologic phenomenon. It seems probable that the abnormality of the thymol turbidity and cephalin flocculation tests in these patients reflected alteration of serum proteins rather than abnormality of hepatic function, while impairment of dye excretion, when present, was probably the result of congestive heart failure.

MYOCARDIAL INFARCTION

The jaundice shown to occur occasionally(21, 57-59) in myocardial infarction has usually been ascribed to absorption from the infarcted area of the products of hemoglobin destruction and considered analogous to hemolytic jaundice. It has also been suggested that acute hepatic congestion and anoxia may contribute to its development. Bilirubin in the urine and increased levels of direct-reacting bilirubin in the blood which may rarely be observed however, are evidence that hepatocellular jaundice may also occur. While the hemolytic component cannot be excluded, centrolobular necrosis shown to occur in the livers of patients with fatal myocardial infarction(45) might well account for hepatocellular jaundice when present. The increased urinary urobilinogen reported in patients with myocardial infarction may represent hemolysis, hepatocellular damage, or both(60).

SUMMARY AND CONCLUSIONS

The laboratory and clinical features of hepatic involvement in congestive heart failure have been reviewed. Impairment of liver function is frequent, with the dye excretion test more frequently abnormal than the flocculation tests, the serum bilirubin level, serum alkaline phosphatase, or the level of urine urobilinogen. The concept of "cardiac cirrhosis" has been discussed and the lack of agreement on the evidence of features of this lesion emphasized.

The pattern of hepatic dysfunction in subacute bacterial endocarditis has also been considered. It is characterized mainly by alteration of the plasma proteins with associated abnormalities of the flocculation tests of liver function. The occurrence of jaundice in myocardial infarction and its possible significance has also been reviewed.

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Surgical Indications and Treatment of Mitral Stenosis*

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While this paper was presented as part of a panel discussion on rheumatic disease, it is independent in its consideration of a single phase of rheumatic cardiac disease. Doctor McCarthy divides patients having mitral stenosis into five categories on the basis of clinical criteria and of pathological physiology. He indicates his beliefs as to the advisability of operating, the probable results, and the mortality following operation, in each category. He briefly describes the technique of commissurotomy.

EDITOR

The surgical treatment of mitral stenosis has been placed securely in the category of accepted surgical procedures. Sufficient experience has been accumulated so that one may evaluate the procedure, and may draw certain conclusions. It is not the purpose of this portion of the panel to cover the operation completely in all its details. The proper selection of patients for commissurotomy, enumeration of the contraindications, and a brief description of the technique is all that time will permit.

HEMODYNAMICS IN MITRAL STENOSIS

The main impediment to the flow of blood is the mitral valve. Blood flows from the atrium into the ventricle during diastole, producing its characteristic apical murmur. Thus, an increased pressure is produced in the left atrium and pulmonary vein, capillaries, pulmonary artery, and, eventually, the right ventricle. Pulmonary arteriolar narrowing occurs, hydrostatic pressure increases, and transudate appears in the bronchi. This may or may not be blood tinged. The lung becomes distended and this causes hypoxia. The hypoxia stimulates the respiratory center, and further augments the pulmonary edema. The output of the left ventricle is decreased. Clinically, cough, frothy sputum, dyspnea, and drowning result. Tachycardia, which is already present, is aggravated by the patient's anxiety. Exertional dyspnea and fatigue are even more common than pulmonary edema.

Cardiac catheterization reveals increased pulmonary arterial pressure but not always in proportion to the degree of symptoms. If the catheter is continued into the pulmonary capillary and wedged as far as possible, the pressure which is obtained is termed "wedge pressure." For practical purposes this pressure reflects that pressure present in the left atrium. One can readily see that determinations of pulmonary vascular pressure are of academic interest rather than of diagnostic and prognostic help.

If the arteriolar constriction remains active, and vessel thickening has not taken place, it follows that the release of the cause of the increased pressure will permit reversal of the pathological physiology.

SELECTION OF CASES

In order to properly select patients and to evaluate the results of surgery in mitral stenosis, it is helpful to classify the patients into various stages of the disease. The number of stages or groups vary with different surgeons but, for the most part, five stages are recognized.

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*Presented at the Annual Session of the Omaha Mid-West Clinical Society, October, 1952.

Stage 1 — Patients with a definite diagnosis of mitral stenosis but without symptoms belong in this category. These patients have a benign lesion with no handicap. Many cardiologists feel that these patients should not be operated upon, while others feel that patients in this category receive better results if they are subjected to operation before cardiac handicap is present. The conservative surgeon would feel that the risk is too great and he needs more indications than simply "operating on a murmur." Those who are conservative, and feel that surgery is not indicated in this group until a handicap presents itself, might be asked whether or not they would wait for symptoms or metastasis before a known carcinoma is attacked surgically. The mortality rate in this group is about 3 to 5 per cent.

Stage 2 — This stage includes the patients with mitral stenosis and with symptoms, but without cardiac or respiratory incapacitation. Patients in this category have a handicap but are compensated. These patients have occasional symptoms, paroxysmal dyspnea, orthopnea, or hemoptysis. The heart shows minimal or no changes, radiographically. The EKG is essentially normal. These are static cases. Excellent results are obtained in this group, especially between the ages of 20 and 30.

Stage 3 — Patients in this group experience more severe and persistent cardiac or respiratory symptoms, but can be brought into compensation by the use of digitalis. In other words, these patients have a handicap and are losing their ability to compensate. There may be some apparent change in the size of the heart. The enlargement is confined mainly to the right side of the heart. There may be some enlargement of the left atrium, as demonstrated by an esophagogram, but it must not be excessive or aneurysmal. The EKG shows right axis deviation. The mortality rate is between 5 and 10 per cent.

Stage 4 — Patients with mitral stenosis who have reached stage 4, present symptoms which are not relieved by digitalization. The liver, lung and myocardium are damaged. The risk of surgery becomes much greater in this group. The mortality rises to 25 per cent.

Stage 5 — Patients in this group are in the terminal phase of mitral stenosis and the stenosis is often complicated by other lesions. For the most part pathologic changes, particularly in the pulmonary vascular bed, are irreversible. There is little argument but that these patients are not candidates for surgical treatment.

CONTRAINDICATIONS TO SURGERY IN MITRAL STENOSIS

The presence of active rheumatic fever is a contraindication to mitral commissurotomy. Some surgeons feel that 10 years should elapse since the last active fever was present.

Subacute bacterial endocarditis is a definite contraindication to commissurotomy.

Aneurysmal dilatation of the left atrium should contraindicate surgery. At least 50 per cent of these patients have mitral regurgitation associated with the stenosis and this produces pathological changes which are greater than when either is present alone.

Certain clinical features, though not strict contraindications, increase the risk and decrease the possibility of satisfactory results. Among these clinical features would be uncontrolled congestive heart failure, atrial septal defects with marked left to right shunt, associated valvular disease, marked cardiac enlargement, especially anything suggestive of enlargement of the left chambers, and the history of arterial emboli having occured.

TECHNIQUE OF OPERATION

The operation is performed with the patient in the right lateral recumbent position and the anesthetic is usually gas-ether-oxygen. The left 5th rib is removed throughout its entire length, and the left lung is packed away. Five cubic centimeters of 2 per cent Xylocaine are placed in the pericardium before it is opened. This latter procedure, plus careful handling of tissue, is probably more important than procaine or procaine amide in the prevention of cardiac arrest or of cardiac irregularities. The pericardium is incised posterior to the phrenic nerve and the edges are retracted with silk guy-sutures. The appendage of the left atrium is grasped with a Satinsky or a Glover clamp and a purse string suture of heavy silk is applied, in a circular fashion, large enough to admit the index finger. The tip of the appendage is incised and the forefinger is introduced into the chamber. In this manner the entire left atrium is examined for thrombi, the presence of septal defects, the degree of stenosis of the mitral valve, the type of stenosis, the amount of calcium deposit, and, at the same time, the jet of blood striking the forefinger during systole denotes the degree of regurgitation. The finger is withdrawn and reintroduced after applying the appropriate type of knife, such as the Bailey or the Glover guillotine, or the Harkin punch; the types of instruments are as numerous as the number of surgeons doing cardiac surgery. In this position the lateral commissure, located at 11 o'clock, and the medial commissure, located at about 5 o'clock, are the two sites to be surgically attacked. The lateral commissure is incised so as to permit an opening of approximately 2.5 cm. If this cannot be accomplished by incising this commissure alone, the hand is rotated and the medial commissure is opened. At this moment the tip of the finger can again evaluate the size of the opening and the degree of regurgitation, if any. The finger is then withdrawn and the opening in the appendage is closed by means of the purse string suture or by two rows of interrupted silk sutures reinforced by a small piece of gelfoam. The pericardium is closed with interrupted silk sutures, but provision is made for the drainage of effusion by not closing it too tightly.

MORTALITY AND RESULTS

Although the mortality and morbidity percentages vary, depending upon whether or not the surgeon attacks, predominately, stages 1, 4 or 5, an overall mortality rate will not exceed 5 to 10 per cent. Again, the selection of cases will determine largely the results, but the great majority will show excellent results, often dramatic. Those who do not respond completely are certainly less handicapped than they were prior to the operation.

The Control of Secondary Hemorrhage Following Tonsillectomy*

J. CALVIN DAVIS, M.D.
Professor and Chairman of the Department of ENT
University of Nebraska College of Medicine
Omaha, Nebraska

This author reports the results, in relation to postoperative hemorrhage, in ninety tonsillectomies. This complication was reduced from the usual five to ten per cent to about one per cent, in this series. He stresses two items as essential to avoid hemorrhage, namely, proper preoperative study and preparation, and the routine use of calcium. He emphasizes the latter of the two. Doctor Davis also relates his methods of caring for the various types of hemorrhage when they do occur.

EDITOR

Much has been written to explain the cause of delayed hemorrhage following tonsillectomy. Incidence varies, depending on the care taken in following up these patients(1). Singer(2) reported the general incidence of secondary post-tonsillectomy hemorrhage to be about 5-10 per cent. It must be remembered that most tonsil and adenoid cases are discharged from the hospital twenty-four hours after operation and that many patients do not report bleeding unless it becomes excessive enough to frighten them(3). Delayed hemorrhage is most frequent about the fifth or sixth postoperative day, but has been reported to occur from 2-14 days following operation(4, 5, 6).

Many factors have been discussed as the causative agents for such bleeding. Neivert(5, 7) felt that the extensive use of salicylates as an analgesic to control pain has greatly contributed to the incidence of this type of bleeding. He states that in Europe the salicylates are not as widely used, thus explaining the lower incidence of post-tonsillectomy bleeding.

Other causes for the development of hemorrhage may be listed as follows: infection; hepatic disease; blood dyscrasia; vitamin C deficiency; and excessive trauma(6, 7, 8, 9, 10).

Many therapeutic procedures have been suggested. The use of vitamin K, and the administration of vitamin C have been recommended(11, 12, 13). The nature of the operation is such that care must be taken not to destroy tissue excessively since no clamps are left in place. It is difficult to prevent infection because bacteria are always present as part of the oral flora.

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*Presented at the Annual Session of the Omaha Mid-West Clinical Society, October, 1952.

In reviewing the physiology of coagulation, one realizes the importance of calcium ions in the coagulation process. As shown by Wiggers(14), the first stage can be summarized as follows:

1. Prothrombin + thromboplastin + Ca = thrombin.

The second stage develops chemically, as follows:

2. Fibrinogen + thrombin = fibrin.

In the final stage, there is no chemical reaction. The role of calcium ions is to aid in the conversion of prothrombin to thrombin. It is interesting to note that excess of calcium ions will delay clotting as much as a deficiency,in normal blood(15). In addition, the calcium ion plays an important role in maintaining normal capillary permeability(16).

For these reasons we believed it logical to treat our patients with a highly soluble calcium preparation in an effort to decrease our incidence of post-tonsillectomy hemorrhage. The following are our results obtained with the preparation we found most effective.

METHOD AND RESULTS

From the above review, one concludes that many avenues are open as to how to prevent post-tonsillectomy hemorrhage. It is my belief that the use of calcium is most helpful in reducing such blood loss. We have tried many preparations before finding one with the proper concentration, stability, and palatability. For three days prior to operation, the patient is given one teaspoonful of the preparation after each meal, and one at bedtime. The juice of two oranges is given the afternoon before operation. The patient is allowed to eat all meals including supper the night before. We also suggest two sticks of candy the night before the operation. We believe it advisable to force fluids during the three days preceding operation. For two weeks postoperative we do not permit the patients to eat such foods as popcorn, potato chips, and other scratchy foods, for fear the trauma will start an oozing, or frank bleeding. The patients are given 1 teaspoonful q.i.d. of Neo-Calglucon syrup* on the fifth, sixth, and seventh postoperative days.

We performed various nose and throat operations on a series of 90 patients (49 women and 41 men) ranging in age from 2½ to 60 years, and employed the preoperative and postoperative method of management outlined above. The results were as follows:

No blood loss	4
Minimal blood loss	85
Hemorrhage	1

In order to control our series we tried many cases without employing any precautionary measures. Bleeding was more extensive than in our series. A young girl in the control group had a severe hemorrhage and required several transfusions.

DISCUSSION

It is my opinion that the use of preoperative precautions as well as postoperative management will markedly reduce primary and secondary postoperative hemorrhage especially in cases of tonsillectomies in young children. During my practice I have employed many preparations, but in the last few years, I have restricted medication to calcium (Neo-Calglucon Syrup). Statistically it is not always conclusive for some of the worst hemorrhages will occur when you have a one-minute bleeding time and a two-minute coagulation time. The reason for failure in the control of bleeding may be attributed to:

1. Residual infection of the tonsils or adenoids that may be still present at the time of operation.
2. Opening of large venous or arterial channels by the technique employed at operation. No coagulant can prevent or stop hemorrhage under these circumstances.
3. Failure to control oozing at time of operation, as indicated by the issue of blood from the mouth and nose as the patient leaves the operating room. Primary hemorrhage is very likely to occur in such a case.
4. Failure to suction out all loose clots at end of operation.
5. Sudden drop in atmospheric temperature and barometric pressure during the postoperative period. (It is a well known fact that clinics become filled with patients suffering from epistaxis, under these atmospheric conditions.)

It is also important to train the nursing staff to be cognizant of the warning signs of primary hemorrhage. The young patient who is pale and has a rapid thready pulse, who is swallowing visibly, and has a rapid respiration, requires immediate attention. It has been our practice to remove the patient to the operating room immediately. This takes him away from the anxious parents and permits us to treat him properly in a quiet atmosphere. In such cases, we remove the clots, suture if necessary, and suture in a sponge. In some cases of adenoid hemorrhage it becomes necessary to put in a post-nasal pack. We have found the use of adrenalin effective at the time of the hemorrhage, but we regret to say hemorrhage may recur in an hour or two. We give such patients transfusions when required, and supportive therapy is also administered.

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*We have used Syrup of Neo-Calglucon in all cases in this study.

Secondary hemorrhage, which occurs on the fifth, sixth or seventh days postoperatively, requires different management. Oftentimes a small clot will come loose and slight oozing may occur at the site of the clot, within the tonsil or adenoid fossa. Removal of the clot and the application of slight pressure with a sponge saturated with an astringent (10 per cent tannic acid in glycerin) will often control such bleeding. In severe cases post-nasal sponges, or transfusions may be required.

We are also careful not to give a young patient two anesthetics within the twenty-four hour period. We have found that anesthetics are very dehydrating, and often produce acidosis. Also, it is difficult to make these patients take sufficient fluids to prevent dehydration. For this reason, we restrict ourselves to the administration of one anesthetic.

We have found that a precautionary attitude has kept our postoperative hemorrhages (both primary and secondary) at a minimum. Supportive measures build up the patient and make the tissues more resistant to bleeding. In our opinion, calcium is of great benefit.

SUMMARY

We have presented a series of ninety postoperative cases (with various known and tried procedures) in which calcium both preoperatively and postoperatively has been administered. In only one case did severe hemorrhage occur. It is our conclusion that the Syrup of Neo-Calglucon is a useful calcium preparation for use in such procedure.

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However accurately we carry out the health examination of the community, we cannot expect to achieve complete victory over infection until the public itself has become better informed. It sometimes happens that an infectious form of primary pulmonary tuberculosis runs such a rapid course that others have been infected long before the next scheduled examination. A flare-up of an older tuberculosis infection may also occur rapidly. Such cases are, however, not common and the patient is brought to bed very soon. In many cases the ignorance and asocial, sometimes antisocial, attitude of the sources of infection have contributed to the spread of infection. (Tobias Gedde-Dahl, M.D., The American J. of Hygiene, Sept., 1952).

Health education of the public . . . is often considered the responsibility of organized voluntary and official community agencies. Of course, it is also the physicians personal responsibility. He certainly should educate his patients and their families and do what he can as part of the community program. Health education methods have changed materially in recent years, with much greater emphasis on community organization and on helping the pepole to help themselves. (Hugh R. Leavell, M.D., The New England J. of Med., December 4, 1952).

In discusing longevity of men (26,000) and women (25,000) who were insured even though they were overweights with a period of observation from 16 to 25 years, and comparing them with similar groups who had standard insurance, the following observations are recorded:

Combining men of all ages (20 to 64 years), the mortality from all causes was 150 per cent of the expected value. Interestingly enough, the presence of overweight at younger ages is more hazardous. The percentage of deaths (actual as per cent of expected) for individuals insured in the third, fourth, fifth, and sixth decade of life was 180, 169, 152 and 131, respectively. . . .—(From Nutrition Reviews, 11:145, May, 1953).

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THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

News and Views

FROM THE LINCOLN STAR:

The flourishing Polk County seat of Osceola has had a stroke of good luck. One of its former citizens, now a wealthy Wyoming resident, has offered to finance on most generous terms the construction of a modern hospital.

It is proposed that the county issue $200,000 in bonds drawing a nominal rate of interest, to be held during the lifetime of the donor, Dr. C. W. Jeffrey, 71, of Rawlins, Wyoming, bonds upon which principal payment never will be demanded.

Osceola's awakened interest in a hospital gives emphasis to the gratifying developments that have taken place in many sections of the state. Nebraska is getting better medical facilities. Some of the progress being made is the result of a federal-state program which has financed a number of well-distributed hospitals throughout the 93 counties. Still other undertakings have been handled entirely locally. Hospital facilities are essential to the modern practice of medicine.

DOCTORS HOSPITAL TO BE ENLARGED—

A 23-thousand dollar building permit has been issued for a nine-room addition to Doctors Hospital in Omaha. Dr. Sven Isacson, acting board chairman, said "the addition is part of a plan which may include a third story on part of the building." It is hoped that the project will be completed by mid-October.

FROM THE OMAHA WORLD HERALD:

W. B. Millard, Jr., Omaha, has accepted chairmanship of the Omaha Committee of American Industry. CAI is a division of the National Fund for Medical Education, and is spearheading a nationwide appeal for 10 million dollars for the country's 79 medical schools. Mr. Millard said "the medical schools are caught in an economic pincers movement—mounting expenses on one hand and shrinking income on the other—which is seriously imperiling their continued existence as independent institutions."

Mr. Millard went on to say, "If industry and other private sources do not accept their responsibility for maintaining the nation's medical standards, the schools may be forced to accept government subsidies."

HERE IS THE IDEA IN POCKET RADIOS—

"Dick Tracy" radios will begin to spring up in the Chicago area in the near future. The Doctors' Radio Station plans to start broadcasting personal messages to miniature radios this fall. The receivers weigh about 6 ounces, fit in a coat pocket, and receive the broadcast messages clearly anywhere within 25 miles of downtown Chicago. Any short message will be sent—for instance:

Dr. Adams—call your office.

Dr. Jones—go to Children's Memorial Hospital—emergency.

Dr. 307 (if you don't want your name used)—call Randolph 6-2900.

This service has been in use in Cincinnati, Cleveland, St. Louis and Philadelphia, on a 24-hour a day basis as authorized by the Federal Communications Commission.

The Kimball County Hospital celebrated its third anniversary during the month of August. In the three years of operation the hospital has admitted 3,810 patients. Several new pieces of equipment have been added in the past year and redecoration of the rooms, hallways and offices has been completed.

GOLDEN ANNIVERSARY—

Dr. and Mrs. Morris Neilsen, Blair, celebrated their Golden Wedding Anniversary on August 26 and held open house for their many friends. The Neilsens who have lived in Blair since 1912, were married at Belden, Nebraska, August 26, 1903. A general practitioner here for 42 years, Dr. Neilsen has become intimately acquainted with most of the people of this community. He has served as a doctor at the birth of several thousand babies, many of whom are now men and women of this community.

Dr. Neilsen, in addition to his work as a doctor, has found time to take part in many civic affairs. He served as city physician for many years, was a member of the Board of Education for 12 years, took his turn as President of the Blair Chamber of Commerce, the Blair Rotary Club and numerous other activities of a civic nature. In 1952 the Lincoln Kiwanis Club presented him their Distinguished Service Medal.

Dr. Ray M. Taibl, director of special education for the state, held out new hope today for the education of Nebraska's handicapped children. Doctor Taibl said a shortage in trained personnel in his department probably would be cleared up "within the next four years" and the present number of trained teachers and therapists would be boosted. "Nebraska need make no apologies for the caliber, the quality or the progress made in special education in the past four years," Doctor Taibl said.

He said the University of Nebraska this fall will begin a special program to train teachers and therapists for work with handicapped children. Doctor Taibl said there was need for at least 20 more speech therapists, about 30 physical therapists and 30 occupational therapists, and others to help the "homebound" handicapped children. Ninety-eight now are employed but Doctor Taibl said this total should be doubled to provide an adequate program.

Some 3,100 children will receive special education in the state this year, compared with 3,028 in 1952. This represents about a third of the children who are eligible for such a program.

FROM THE GRAND ISLAND INDEPENDENT:

Passavant Memorial Hospital, a Northwestern Medical School affiliate, has announced it will honor the late Dr. Sanford R. Gifford with a commemorative unit in a new ten-story addition to the hospital.

Doctor Gifford was a graduate of the Omaha Medical College and served on the faculty of the University of Nebraska College of Medicine from 1890 to 1929, serving as chairman of the department of ophthalmology. Twice during that time, Doctor Gifford was Dean, of the Omaha Medical College from 1895 to 1898, and the University College of Medicine from 1902 to 1911.

The West Point Memorial hospital received a check for $500 from the Omaha Livestock Exchange, as a donation for equipment needed in the Physical Therapy Department at the hospital.

Dr. Willard O. Thompson, editor of the new Journal of The American Geriatrics Society, has named a former Atkinson girl, Miss Beverly J. Chace, as assistant to the editor. The magazine publishes original articles dealing with the clinical study of geriatric problems, case reports, review articles, editorials, etc.

FROM THE OMAHA UNIONISTS:

A union label portable iron lung will be presented in each state of the U.S. on Labor Day as part of the national community life-saving program to be sponsored by the AFL Union Label and Service Trades Department the week of September 7-13. The lungs, purchased by local unions, city central bodies, state federations of union label councils, will be donated to hospitals, sanitariums and fire department rescue squads in the name of the American Federation of Labor.

WASHINGTON—

The government has reported that living costs edged to a record high in mid-July. The increase was enough to give a million auto industry workers a 1 cent hourly pay boost.

It was the second straight month that the government's living cost measurement has hit a record. The index has risen now for five months in a row.

Higher prices for food, rent, transportation and medical care were the main items responsible for the new hike in consumer costs.

FROM THE GIBBON REPORTER:

Does your town need a doctor?

The American Medical Association has issued a highly informative pamphlet describing how the small communities of the nation can go about obtaining resident physicians.

To begin with, two questions must be answered: First, does the community really need a physician and will it support him; Second, will the entire community cooperate to demonstrate its need and desire for a physician? As the booklet points out, in these days of rapid transportation it is not necessary that a doctor be located in every hamlet. He should establish himself where he can do the most good for the greatest number of people.

The community in search of a doctor should inventory what it can offer him, in the light of medical practice, family living, and economic considerations. Such factors as adequate housing and good schools, for instance, are important inducements. It is a good idea to prepare a brochure listing the community's points of interest, advantages, and other pertinent information. This brochure is then sent to deans of medical schools and to hospitals in the region.

Some communities have successfully solved the problem by raising funds to build and equip small but up-to-date clinics and hospitals, which are a strong attraction to ambitious young doctors. Others have made arrangements for low rental on home and office during the financially difficult first year of practice, after which the physician has the option of paying full rental or buying.

FROM THE NORTH PLATTE TRIBUNE:

Once again, a bill to establish compulsory government health insurance, and to take other steps which would give government the whip-hand over our entire medical system, has been introduced in Congress. And, once again, the proponents of this measure (which almost everyone believes would be but a prelude to socialized medicine) argue that it is necessary because the people have no protection against the financial shock of illness, and that the cost of medical care is an insuperable burden.

Two facts cast an illuminating light on these hoary arguments.

Fact one is that more than 90,000,000 Americans now voluntarily carry some form of hospital, surgical and medical insurance—and this huge figure does not include the legions covered by industrial insurance, veterans' benefits, and local, state and federal custodial programs. The growth of these voluntary plans is unrivalled in the whole broad history of insurance.

Fact two is that, according to figures gathered for the Federal Reserve Board by the Survey Research Center of the University of Michigan, 80 per cent of American families have no medical debt at all; 17 per cent have debts ranging from $2 to $200, and only three per cent have debts in excess of $200.

Much remains to be done to improve medical care—and it is being done, in a sound and orderly manner. No great nation can point to achievements in this field which are equal to ours. Certainly, the small percentage of indigents can be adequately helped without setting up a compulsory system which would cost untold billions a year to operate — and which would undermine and eventually destroy free, progressive medicine.

FROM THE OMAHA WORLD HERALD:

A new four-million-dollar, 250-bed Clarkson Hospital will be built soon, it is announced, near the University of Nebraska College of Medicine. Clarkson's present building will be taken over by Lutheran Hospital. Lutheran will use this building for its medical and surgical divisions, and convert its near-by present building into a psychiatric unit. This will give Lutheran an integrated medical center.

FROM THE LINCOLN JOURNAL:

Mrs. Oveta Culp Hobby has called upon the medical profession to defeat the threat of "socialized medicine," by presenting a plan that would protect the average American family from the financial loss of "catastrophic illness."

Mrs. Hobby believes the "overwhelming" majority of the American people have no desire whatsoever for socialized medicine in any form," but that a certain middle-class group is "frankly and ardently" in favor of it.

She said a plan must be devised for a nonfederal health protection plan "within our own free-enterprise system," using the brains and experience of the medical profession to plan it.

Families in the top income brackets can afford to pay their own way, according to Mrs. Hobby, and the low income groups can use publicly-supported clinics. But the seriously affected people are those who would normaly expect to pay their own way and who "neither by education nor background" can expect charity, she said.

FROM THE OMAHA WORLD HERALD:

Once again the Mid-West Clinical Society has announced a list of distinguished speakers and lecturers for its annual fall assembly. This meeting will run from October 26 to 29, and is expected to attract 1,200 physicians, mostly from Midwestern States.

Because of the Mid-West Clinical Society, and similar groups in other regions, the doctor who wants to keep abreast of medical progress now can do so without too great cost in time or money.

In its 21 years, the Mid-West Clinical Society has done enormous good for medicine throughout the Midwest, and for Omaha as a medical center.

DOCTOR-DRAFT ROLLS ON DESPITE EXCESS OF MEDICAL OFFICERS—

Regardless of the fact that there is already a great excess of medical officers in the armed forces, Selective Service refused to cancel its latest physician-draft call for 524 physicians. These doctors must accept reserve commissions and apply for immediate service, or be drafted as privates. Why?

LEGION OPPOSES SOCIALIZED MEDICINE—

The American Legion has been a staunch opponent of socialized medicine for anyone excepting ex-service men. One can foresee that with free medical service provided by the Federal government to twenty-odd million veterans, to nearly another million coming out of service yearly, to the dependents of men in military service, and, if it can be legislated, to the dependents of veterans, there may be little left to argue about.

FIRST SESSION 83rd CONGRESS AND HEALTH ISSUES—

The first session of the 83rd Congress enacted the following laws that relate to health issues:

P.L. 217—Relates to inspection of drug industry by Food and Drug Administration to aid control of barbiturate traffic.

P.L. 84—Continues doctor-draft and the extra monthly payment, to July 1, 1957.

P.L. 151—Extends Hill-Burton hospital program to July 1, 1957.

P.L. 37—Relates to more liberal requirements for commissioning nurses and women medical specialists in Army and Air Force.

P.L. 201—Amended Food and Drug Act to change name of aureomycin to chlortetracycline.

THE ARMOUR LABORATORIES IN TIME MAGAZINE—

Time, The Weekly Newsmagazine, for August 31, carried a full page advertisement of The Armour Laboratories. This page featured Biopar tablets. This came out in a Time ad before Armour had detailed the profession on this product. If you have not yet been detailed on Biopar, you should write Armour and find out what it is. Your patients will demand it, and not to have heard about it will be embarrassing.

MORE NEW HOSPITALS IN NEBRASKA—

Schuyler, Loup City and Minden have new hospitals that are in the construction stage, but all are expected to be completed and in service this fall. The latest city to enter the hospital-building project is Sidney. The plans are said to be complete for a fifty-bed structure to be known as Cheyenne County Memorial Hospital.

CONFERENCE ON VETERANS MEDICAL CARE HELD—

A conference on veterans medical care was held in the A.M.A. Auditorium in Chicago, during September 1, 1953. This conference was sponsored by the Committee on Federal Medical Services of the Council on Medical Services of the A.M.A. Representatives from state medical associations attended. This seems to be a step toward the clarification of the action decided on by the House of Delegates relative to present trends in Federal Medical Care.

MEMORIAL TO LATE DR. E. T. MANNING—

(From the Lincoln Sunday Journal - Star, 8-16-53)

A public health scholarship fund memorializing the late Dr. Ernest T. Manning, longtime Omaha public health official, has been established at the University of Nebraska, Perry W. Branch, director-secretary of the University of Nebraska Foundation, announced.

Income from the $4,000 fund will provide scholarships for undergraduate students in the University's College of Medicine who plan to specialize in the field of public health.

Donors to the fund are his wife, Lucia P. Manning, and three daughters and their husbands, Mr. and Mrs. Kenneth Burkholder, Mr. and Mrs. Charles Schwartz, and Mr. and Mrs. William Davis.

Doctor Manning, who died last June, was assistant professor of pathology at the University's medical college from 1909 to 1920. He then served in the Omaha Public Health Service and later as public health officer of Omaha City Schools. During World War II, he was a part-time member of the University's medical faculty.

Less than half the sugar consumed in the United States goes directly into the kitchen. Nearly 60 per cent is sold to food manufacturers.

Announcements

Special attention is directed to the first two announcements by your President, Dr. James F. Kelly, on "Cancer," and "Multiple Sclerosis."

CANCER—

Dr. Harold E. Eggers, who, for the past few years, acted as director of lay education for the American Cancer Society, Nebraska Division, has resigned, and no one as yet has been secured to do this work. Therefore, it falls upon the local societies, or in fact, each each individual doctor, to interest himself in the problem of lay education in cancer in-sofar as it should be presented to the various groups in his community.

The citizens of Nebraska have been very generous in their annual donations to the cancer fund and this has made it possible for us to secure equipment and teaching material which is at the disposal of any of the sub-divisions of the State Medical Association. Just what program is to be utilized is to be left to the local societies or their members. Material for lay education can be secured by contacting the American Cancer Society, Nebraska Division, 4201 Dodge Street, Omaha, Nebraska. Much literature for lay education is available, as well as sound-motion-picture films, lantern slides, and speakers who will be assigned from the State Medical Association if it is the wish of the local medical group. In return for the money the citizens of Nebraska have given us, we must make a special effort to see that the material this money has provided is used widely and properly.

The professional educational program is under the direction of the Nebraska Cancer Research and Educational Society, and any inquiry regarding speakers for tumor clinics should be directed to the headquarters of the Nebraska Cancer Research and Educational Society at 4201 Dodge Street, Omaha, Nebraska.

The films and teaching material on hand at the cancer center at 4201 Dodge Street are divided into professional and lay educational material. Any doctor wishing to address the people in his community is welcome at the Cancer Center where he can go through the material and have the films shown, select what he wishes to use, and, after he has finished in his community, he may return it to the Cancer Center.

The material for professional education is to be widely used this year in all the tumor clinics. Every film will be shown at one time or another during this coming year. These films are also available for any county or district meeting and should be shown, as a rule, right after the regular meeting.

Any inquiries or requests may be directed to Cancer Center, 4201 Dodge Street, Omaha, Nebraska.

JAMES F. KELLY, M.D.,
President.

TO ALL PHYSICIANS—

Mrs. Vivian Reeves, 4940 Davenport Street, Omaha, Nebraska, lay chairman of the Multiple Sclerosis Committee, Nebraska Division, has requested that all doctors in the state make known to the State Headquarters at the above address the number of multiple sclerosis cases under their care or known to them in their community. This is merely an attempt to establish the prevalence of this rare disease in the State of Nebraska. Just report the number of cases. There may be some over lapping, but that is not too important. However, as nearly an accurate report as possible is desirable.

JAMES F. KELLY, M.D.,
President.

CLINICAL CONGRESS AMERICAN COLLEGE OF SURGEONS—

The Clinical Congress of the American College of Surgeons, meeting in Chicago, October 5-9, will give not only a preview of surgery of the future but serious consideration of the tried and effective methods. There will be presented 190 papers based on original and independent research and delving into many fields. Postgraduate courses, telecasts, and many other interesting and instructive activities will be included. Headquarters, Conrad Hilton Hotel.

The conquest of tuberculosis in our country will be expedited by concentrating on those measures which have been most productive in the past decades. These are early case finding, prompt and adequate treatment, including the newer surgical procedures, and effective medical follow-up and rehabiliation of arrested cases. Vigorous efforts along these lines are absolutely essential not only for the welfare of those with the disease but also for the protection of those who might otherwise become infected. The detection and isolation of infectious cases are the most effective curbs to the spread of the disease. Louis I. Dublin, A 40 Year Campaign Against Tuberculosis, Metropolitan Life Insurance Company, 1952.

News from Our Medical Schools

SUPERVISOR OF MEDICAL EXTENSION ADDED TO UNIVERSITY STAFF—

As of September 1, 1953, the staffs of the University of Nebraska College of Medicine and the University Extension Division were expanded to include a Supervisor of Medical Extension. Apointed to fill this position, Mr. Albert Keene Smith will work with the College of Medicine as lay director of a program of medical extension which has been in process of development since the organization of a Refresher Course Committee about one year ago.

Mr. Smith has recently returned from American Samoa where he served for two years as administrator of a 250-bed hospital and executive officer of the Public Health Department. Prior thereto he held hospital administrator positions at Grafton, North Dakota, and Cody, Wyoming. He has a B.A. degree in Business Administration from the University of North Dakota, is married, and has a four-year-old son named Marc.

Coming Medical Events

NEBRASKA STATE MEDICAL ASSOCIATION REGIONAL POSTGRADUATE CIRCUIT COURSES—
September 28—Alliance
September 29—McCook
September 30—Hastings
October 1—Columbus
October 2—Wayne
October 3—Nebraska City

OMAHA MID-WEST CLINICAL SOCIETY 21st ANNUAL ASSEMBLY—October 26-30, 1953, Hotel Paxton, Omaha, Nebraska. Miss Irene Rau McCarthy, 1036 Medical Arts Building, Omaha 2, Nebraska.

NEBRASKA STATE RADIOLOGICAL SOCIETY—October 21, 1953, Veterans Hospital, Lincoln, Nebraska.

NEBRASKA HEART ASSOCIATION-IOWA HEART ASSOCIATION FALL CLINICAL CONFERENCE—Blackstone Hotel, Omaha, Nebraska, November 7, 1953.

NEBRASKA HOSPITAL ASSOCIATION—November 12 and 13, Hotel Cornhusker, Lincoln, Nebr.

THE NEBRASKA SOCIETY FOR CRIPPLED CHILDREN — Third annual meeting, Fontenelle Hotel, October 8th, Omaha, Nebraska.

CRIPPLED CHILDREN'S CLINICS—
October 10—O'Neill, High School
October 24—Wayne, Benthack Hospital
November 7—Alliance, St. Joseph's Hospital
November 21—Ogallala, Elks Club
December 5—McCook, St. Catherine's Hospital
December 12—Grand Island, St. Francis Hospital

The Woman's Auxiliary

TAKE PRIDE

In the majority of county auxiliaries the activity for the year is launched with the official board meetings held by both county and state officers in the fall. A great deal of planning precedes each such meeting designed to bring purpose and accomplishment out of the auxiliary meetings which follow.

The state board is a coordinating body, the liaison between members-at-large, county units, and the national auxiliary. Chairmanships and offices on this board more or less define the fields of activity outlined by the national headquarters. The degree of activity varies with each state, the same as the adaptation of their outline varies in each auxiliary. Primarily, each auxiliary is impelled by the needs of its own community. That is as it should be, but with ingenuity and cooperation between committees it would be possible to see that results covered several fields.

Membership and active participation in auxiliary does not bring a doctor's wife new responsibility. Continued service in any civic organization in the interest of better health or better health conditions and membership in the local medical auxiliary, simply cements a fine public relations feeling and identifies the work with organized auxiliary planning.

I implore each doctor's wife in Nebraska to respect the national auxiliary and to belong. It has not been created for us, but rather has grown to its enviable size and great accomplishment because of our combined individual strength. Your initial qualification is to be the wife of a member in good standing in the Nebraska State Medical Association. All other qualifications are existent if you serve the community in which you live with the same love and sincerity as your husband serves his practice.

The relation of the local auxiliary to the national auxiliary is as the moon is to the sun. The brilliance is simply reflected. We are the unit candle power of light, but many candles are required to make the light shine far.

Willing service to our respective communities shall be our golden rule for the year—so join the auxiliary early, and identify it with your efforts.

MRS. JAMES P. DONELAN,
President.

The auxiliary to the Dawson County Medical Society met in Gothenburg, Friday, June 26th, at the home of Mrs. S. H. Perry. The program for the afternoon was given by Mrs. Floyd Housel of Lexington. Those present from Cozad were Mrs. Charles Hranac, Mrs. Charles Sheets and Mrs. Rodney Sitorius.

The Lancaster County Medical Auxiliary Board met at the home of Mrs. John T. McGreer, Jr., president, September 2nd, at 10 o'clock.

The fall board meeting for Officers, Chairmen, County Presidents, and District Councilors of the Woman's Auxiliary to the Nebraska State Medical Association met at the Cornhusker Hotel in Lincoln on Thursday, September 24th, at 10 o'clock and re-assembled briefly following luncheon at 12:30. Mrs. James P. Donelan, president, presided.

The Executive Board of the Omaha-Douglas County Auxiliary met at the home of the president, Mrs. C. R. Hankins, on Monday, September 28th.

MRS. DONALD F. PURVIS,
Publicity Chairman.

WHERE IS THE MEDICAL CARE PROGRAM OF THE VETERANS ADMINISTRATION HEADED?

(Continued from page 355)

taxpayer (including the veteran); we are giving one more boost to our national government towards bankruptcy; we are skyrocketing the cost of private hospital care; and we are most decidedly, rapidly backing into a type of socialized medicine second only to that of England's total socialization.

Only a well-directed, sustained criticism of the existing VA law until Congress acts to change it will resolve this problem. It is the obligation of every citizen to familiarize himself with the facts, and to enter this battle of "back door" socialization.

INTERIM COMMITTEE ON
VETERANS AFFAIRS.
J. P. REDGWICK, M.D., Chairman.

According to the National Office of Vital Statistics the trends of the past several years are continued in 1952: a substantial decline in tuberculosis mortality but a comparatively small decline in the number of newly reported cases. (Public Health Reports, June, 1953.)

Know Your Blue Shield Plan

Doctors attending the Omaha Mid-West Clinical Society Annual Assembly October 24 through 29 at Hotel Paxton, Omaha, are cordially invited to visit the Blue Cross-Blue Shield exhibit booth. It is hoped that County Medical Society officers and members of Blue Shield Liaison Committees, especially, will stop at the booth to secure current materials and information.

"When there's a hospital bill, there's a doctor bill, too!" This reminder appears on the cover of a Blue Shield folder which is being sent to "Blue Cross Only" members to induce them to add Blue Shield for medical-surgical protection. The Blue Shield folder outlining benefits will be enclosed with quarterly statements to approximately 5,000 direct-payment members of Blue Cross.

He'd Kill the Goose That Lays the Golden Egg!

"Couldn't I go to the hospital for just a few days to recuperate?"

Doctors' offices having as few as four on the payroll may form Blue Cross-Blue Shield groups if all four of the eligible employees enroll. It is to their advantage to organize an Employee Group, because dues for group membership are appreciably lower than dues for direct-payment membership. Group application cards and instructions for organizing an Employee Group may be secured by telephoning or writing to: Enrollment Department, Blue Cross-Blue Shield, 518 Kilpatrick Building, Omaha.

This fall, the Individual Enrollment Campaign will be conducted for two months—October and November. It is hoped that proportionately more members will be enrolled in the two-month period than during the usual one-month campaign. Newspaper advertisements will again publicize the availability of Blue Cross-Blue Shield membership to any Nebraskan under age 65. Hospitals and doctors have been supplied with promotional materials, and they are urged to encourage their patients to enroll during the campaign.

Human Interest Tales

Comunications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. James Frans, Kansas City, has located in Syracuse.

The Memorial Hospital in Schuyler was dedicated on September 26.

Dr. Frank Brewster, Holdrege, has opened his offices in Franklin.

Dr. W. R. Miller, Sterling, opened his medical office in Axtell, Kansas, in August.

Dr. E. C. Hanisch underwent surgery at Clarkson hospital in Omaha on August 28th.

Dr. R. S. Wycoff, Lexington, has been named president of the Lexington City Council.

Dr. Kenneth G. Chinberg, formerly of Oakland, has opened his office in Springfield, Missouri.

Dr. W. M. Fitch will return to Albion after his release from active duty on November 10, 1953.

Dr. W. J. McMartin, Omaha, is the new president of the Western Association of Railroad Surgeons.

Dr. and Mrs. R. B. Rundquist, Chappel, left August 30th for a two week vacation in California.

Dr. R. E. Klaas, Osceola, announced that he will move to Humphrey about the middle of September.

Dr. J. B. Redfield, North Platte, is a candidate for lieutenant governor of the 10th Kiwanis division.

Dr. R. J. Lynn, Ord, has been appointed medical advisor of the Valley County Selective Service board.

Dr. Paul Ekart, Alma, will begin a 2-year residency in anesthesiology at the University of Iowa starting September 1st.

Dr. E. J. Loeffel, Mitchell, showed moving pictures he took while in Korea, to members of the Mitchell Kiwanis club, recently.

Dr. H. S. Tennant, Stanton, was elected president of the Elkhorn Valley Medical Society at the 31st annual convention in Norfolk.

Dr. W. R. Miller, formerly of Sterling, was injured in an auto accident recently while he was on his way home from his office at Axtell, Kansas.

Dr. Michael Crofoot, Omaha, is now located at 670 North 50th Street, Omaha. Dr. Raymond Lewis, Omaha, has moved to 5015 Dodge Street, Omaha.

Dr. and Mrs. Donald B. Steenburg, Aurora, have returned home after a three week's vacation in Western Nebraska, Wyoming, and at Estes Park.

The offices of Drs. O. E. and H. E. Liston, Elmwood, were burglarized recently. The intruders stole some narcotic drugs and a considerable sum of money.

Dr. Bernard A. Owen is now associated with Dr. Wendell Ford in Hemingford. Doctor Owen has just completed his internship at Porter Sanitarium in Denver.

Dr. William J. Reals, a former Omahan, has been awarded a commendation ribbon for establishing the medical laboratory at Shepard Air Force Base, Wichita Falls, Texas.

The Creighton University School of Medicine announced the addition of three faculty members. The new instructors are Drs. Julian J. Baumel, Joseph F. Berberism, and Wayne L. Ryan.

Dr. J. A. Slunicko and family, have returned home to Ralston. Doctor Slunicko has been released from service and resumed his practice of medicine on September 14 in the Omaha Livestock Exchange.

Fifty-three children were registered for the Crippled Children's clinic held at the Elks Hall in Chadron. The children were examined by Drs. Fritz Teal and Fred Webster of Lincoln, and Dr. Robert S. Grant of Omaha.

Dr. Roy Villasor, Manila, P.I., was the guest of Warren Wegner of Grand Island for several days. Doctor Villasor has just completed a year at Johns Hopkins Medical center where he was specializing in tumor surgery.

Dr. Robert Melzer, Benkelman, is reported to be an accomplished mountain climber. According to the Denver Post, Doctor Melzer and his father are two of the four known persons who have climbed all sixty-seven of the nation's 14,000 foot peaks.

Dr. and Mrs. Charles Lucas, formerly of Shelton, observed their 60th wedding anniversary at their home in Los Angeles, September 7th. They were residents of Shelton for more than fifty years during which Doctor Lucas was engaged in the practice of medicine.

The following Kearney doctors volunteered their time to help the Red Cross bloodmobile during its visit on August 19-20. Drs. H. C. Hansen, Ray S. Johnston, L. D. Lane, O. D. Johnson, T. S. Elliott, Richard D. Johnson, W. E. Nutzman, Frank Sisler, R. F. Jester, and S. O. Staley.

Dr. S. Morgulis, chairman of the biochemistry department of the University of Nebraska, has invited Lyle W. Nilson, of Aurora, to spend a year in graduate research at the University of Nebraska College of Medicine. He is the only University of Nebraska student to receive a research award in biochemistry this year.

Parents of crippled children are the new reading audience to which all future issues of The Crippled Child Magazine will be directed, it was announced Monday, June 29 by the National Society for Crippled Children and Adults, the Easter Seal Society, publishers of the 30-year old bi-monthly magazine.

Lawrence J. Linck, executive director of the Society, pointed out that the magazine, which was formerly directed at professional workers of the handicapped, is being changed because of a recent analysis which indicated the need for a magazine slanted especially to help the parents of crippled children in their many and varied problems.

He stated that the change reflects the growing conviction of professional workers that the success or failure of their efforts with the individual crippled child rests on the attitude of the parent.

Mr. Linck, in an editorial in the current issue, writes that the Easter Seal Society is seeking constantly with all the means it can muster "to help make full lives out of what would have been partial lives only a generation ago. The basic area in which this triumph finally must be won is the home."

He states that in the home the crippled child meets his first test of complete acceptance and that it is in the home that he must learn to share with others the problems of a community existence. It is also in the home that the crippled child must learn to share a family love both in the giving and receiving of it.

Mr. Linck also announces the addition of two prominent editors to the staff of the magazine who will serve as consultants. They are Earl S. Miers, noted author, editor and lecturer and a member of the executive committee of the National Society, and Dr. Noah D. Fabricant, well-known medical writer, who is associate editor of the Journal of the American Medical Associaton.

"With this issue, The Crippled Child Magazine passes into a new cycle," writes Mr. Linck. "We hope to make each issue a new opportunity for dealing with the problems confronting parents and child. We hope in time to inform, to entertain, to meet the needs of all members of the family. Parent, doctor. psychiatrist, therapist, educator and those who have lived with crippling disabilities each must—and will—be heard. The substance of their message, we believe, will be new strength, firmer courage, and enlightened hopefulness."

Technical material, previously published in the magazine, will be made available in special pamphlet editions. Announcements of these pamphlets by subject will be carried in future issues of the publication.

The change in editorial slant is the magazine's first major change in 30 years. It was approved by the National Society's board of trustees at its recent semi-annual meeting.

Exactly one hundred years ago — in 1853 — the doctorate thesis of Claude Bernard describing the "internal secretion" of the liver opened the era of modern physiologic chemistry. Besides corroborating previous announcements of his discovery of "hepatic sugar", Bernard described in this historic opus the quantitative influence of the state of nutrition, the nature of food, exercise, age and other factors on the rate of synthesis and of disappearance of liver glycogen . . . —(From Nutrition Reviews, 11:154, May, 1953.

Perhaps the most important factor in the incidence among hospital personnel is the undiagnosed case of tuberculosis. The only way to prevent contact with such sources is to discover these unsuspected cases earlier than seems possible in most general hospitals. It is suggested that the best means of offering this protection to medical personnel is to make routine chest films of every patient admitted to a hospital. (William A. Abruzzi, Jr., M.D., and Rufus J. Hummel, M.D., The New Eng. J. of Med., April 23, 1953.)

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EDITORIAL

DIABETES DETECTION DRIVES

Campaigns to entice people to have their urines examined with the object of detecting the presence of glycosuria are, curiously, named "drives." The results of these brief campaigns are, essentially, two: to search out a few of the many unknown cases of diabetes mellitus; and to entice some of the known diabetics, who have abandoned their therapeutic regimens, to return to their doctors and to resume adequate care of their disease.

The latter of these, enticing the diabetic patients back to medical care, which they have abandoned, is certainly of equal importance with the detection of new cases. This effect is the result of publicity by radio, by television, by the printed page and by the spoken word in contrast with the new-case-finding by urinalysis. It is obvious that successful care of a diabetic person depends not only on the doctor's knowledge of the disease, but also upon the facility with which he is able to transfer this knowledge to the patient. The degree of intelligence and cooperation exhibited by the patient often may be the key to success or failure. Perfection in care of the patient can postpone, or may sometimes prevent, the dire complications of diabetes mellitus, yet the percentage of patients who receive or accept perfect care is probably redicuously small.

The treatment of diabetes mellitus has a high nuisance value. It is a lifelong problem, it often attacks those who love best to eat, it is difficult to manage away from home, its care requires daily urine examinations and frequent trips to be checked upon by the doctor, etc., etc. A full knowledge of the consequences of inadequate treatment must, therefore, be placed before these patients by the physician, by the nurse, and by the dietitian, not once but repeatedly. These key persons must, therefore, be very familiar with diabetes mellitus in all its facets, and must be able to transfer their knowledge in an easily understandable fashion.

Diabetes detection drives will always uncover a few new cases, many of whom will place themselves under adequate treatment. The more important aspect of these drives, however, is to keep diabetic people under adequate supervision and care, and to entice the backsliders to return to the fold.

As a public service, it is important that physicians participate in every possible way to make these "drives" successful. Dr. Morris Margolin, as chairman of the Diabetes Committee of the Nebraska State Medical Association, has conducted the detection drives in Nebraska in 1950, '51, and '52. The resumes of the results of these efforts, as presented by Dr. Margolin, suggest that there has been insufficient cooperation by doctors, and that the extent of cooperation has steadily declined. The fullest concurrence of effort on the part of Nebraska doctors to make the drives successful is a service we owe the public of our State, and a debt we should be glad to pay.

TUBERCULOSIS IS STILL AN IMPORTANT DISEASE

(Guest Editorial)

The approach of the Christmas season, bringing with it, among other things, the annual Christmas Seal Sale, makes this an opportune time to turn our attention to the status of tuberculosis in Nebraska.

Back in the thirties, when our association gave the original impetus to tuberculosis control by conducting county-wide tuberculin surveys, the goal was expressed as "to transform tuberculosis into a rare and unimportant disease, with a death rate of less than 10 per 100,000." This goal has been reached and surpassed. It is an indication of changing standards in public heath that we cannot be satisfied with this degree of success. Tuberculosis may be rare as compared with its frequency 25 years ago but the similar or greater decrease of other infectious diseases leaves tuberculosis still important. Part of the explanation for the remarkably low rate of 5.4 in 1952 is improved treatment, since morbidity has not decreased as much. The low mortality rate, however, together with the low yield in x-ray surveys and the much lower percentage of positive reactors found in recent tuberculin surveys, all indicate a much lower incidence of tuberculosis in our population.

The comparative rarity of the disease brings with it some peculiar problems in efforts at further eradication. The "index of suspicion" which is essential for the diagnosis of any disease has undoubtedly been reduced, so that the occasional case which does occur may be missed. The doctor may even forget that tuberculosis is a reportable disease. Reporting of tuberculosis has always been poor, but it seems to be getting no better. Figures recently compiled by the Lancaster County Tuberculosis Association show that during the past six years only 20 per cent of the known active cases had been reported by private physicians. Without reporting, effective early treatment and control are impossible.

When tuberculosis mortality and morbidity reach the low rates which exist in Nebraska, a peculiar problem in case-finding develops, in that the disease, instead of being more or less uniformily distributed throughout the population, exists in small nests, clustered around the active case. This means that large scale x-ray surveys will be rather unproductive and will become increasingly so. BCG vaccination is admittedly impracticable in areas of low incidence. Looking to the future, it seems safe to say that mass methods of control will become less effective except in special situations, such as schools, hospitals and institutions. This means that the responsibility for tuberculosis control will be thrown back to the individual doctor. If he is to meet this responsibility, it would appear that he must acquire certain attitudes toward the disease. He must be constantly aware of tuberculosis as a diagnostic possibility. He must remember that a diagnosed case of tuberculosis may mean that there are other cases in the immediate vicinity, and should make at least a family investigation as a minimum. He must realize that even though the case has been discovered in a mass survey, it is still his patient for which he has permanent responsibility. He must also face the fact that many of the things that need to be done are beyond the powers of the indiivdual practitioner and should learn to make full use of existing facilities by prompt reporting and full cooperation with public and private agencies concerned.

The first reports of the large-scale use of BCG have now appeared, and show that the occurrence of new cases in a group of positive reactors over a 6 year period was six times as great as in an equal number of negative reactors, less than two thirds of which received BCG. This report reaffirms the teaching that the place to look for active tuberculosis is among the positive reactors. One might go on to say that the place to look for positive reactors is in the immediate vicinity of the active case. This re-emphasizes the importance of the family investigation, the life-long supervision of the positive reactor as well as the proved case, and the value of tuberculin as a diagnostic tool. These principles appear to constitute the future trend of tuberculosis control in low-incidence areas, leading to eventual eradication of the disease.

E. W. HANCOCK, M.D.,
Lincoln, Nebraska.

A NEW DRUG TO LOWER BLOOD PRESSURE

A pure compound which temporarily lowers blood pressure in animals has been isolated from rhododendron leaves by scientists of the National Heart Institute, Public Health Service, Department of Health, Education, and Welfare.

Chemically, the compound is pure but its structure is a mystery. Called andromedotoxin, the substance resembles the veratrum alkaloids in physiological actions, but is not nitrogen-containing, as alkaloids must be. It has a strong but brief hypotensive effect in low doses.

Until the 18th Century, sugar was considered a luxury item and a medicine. Queen Elizabeth of England was first to introduce sugar into her domestic household as an article of diet.

Newer Concepts of Diabetes Mellitus

C. R. HANKINS, M.D.
Omaha, Nebraska

Doctor Hankins reviews the subject of metabolism as influenced by enzyme systems and hormones, and as related to the homeostatic control of body constituents. This tends to focus the readers attention on factors other than insulin that also may be of great importance in keeping carbohydrate metabolism within normal bounds. One is impressed with the relative simplicity of the treatment of diabetes mellitus and of its complications when compared with the physiochemical changes that are initiated within the body.

EDITOR

The subject of endocrinology and its relationship to metabolism has been one of the fastest growing and most fascinating fields in medicine. The vast amount of research, the large number of isolated studies and discoveries have demonstrated the high degree of integration, interdependence and correlation of the metabolic activities of the body. Functions considered independent entities have been shown to be correlated with, and dependent upon, other functions. In spite of the apparent maze of data being accumulated about each metabolic function, the overall understanding of the metabolic processes is becoming clearer and is fitting better into an understandable pattern.

A concept that is more widely appreciated now is the state of a dynamic balanced metablism, or a system of homeostatic control of body constituents. For years it has been known that certain chemical elements have a constant normal measurable value in the body—a constancy of the internal environment has been demonstrated throughout the whole realm of animal life. Any marked deviation from normal in maintenance of this internal environment is manifested in a disturbance in the organism, or a disease; and, if the uncontrolled substance is a vital constituent, the derangement may lead to death. Some widely known examples of this are the hyperglycemia in diabetes mellitus; the hyperkalemia and hyponatremia of Addison's disease; the hypocalcemia of tetany, etc. A dynamic metabolic force must be in effect to keep the internal environment constant by nicely adjusting the rate of availability of a material to the rate of utilization of this material. This homeostatic mechanism must finely correlate utilization and excretion so that a balance is maintained with availability and ingestion of these various materials.

Of the many chemical reactions that have been studied in the body, almost all of them have been shown to have a specific enzyme system to facilitate the rate of reaction. An enzyme system is usually composed of three component parts: (1) a protein material, the enzyme itself; (2) a non-protein nitrogen substance, the co-enzyme; (3) an inorganic element, the co-factor. Enzyme systems exert a tremendous impetus to a specific chemical reaction, accelerating the rate of this reaction greatly. Enzymes are considered to be present by virtue of a specific gene for each enzyme system in the cell; thus, enzyme systems are present or absent by genetic control. Mutations can occur eliminating certain enzyme systems, or substituting new ones working in different substrates. Our present system of chemotherapy and antibiotic therapy is based on the premise that a certain vital enzyme system is blocked in the bacteria or invading organisms, thus blocking growth or causing death of the invader.

Considering the thousands of chemical reactions taking place in the body, and realizing each reaction is considered to be aided by a specific enzyme system, the complexities of enzyme chemistry, and so, of metabolism, are evident. The possibilities in this field are legion. Is cancer a specific disturbance of certain enzyme systems? May these disturbed systems be blocked by some chemical substrate? Are bacteria, by mutation, developing different enzyme systems to replace the ones blocked by our present drugs? Can new blocks for these new systems be devised?

The exact mechanism by which hormones operate is not understood in detail. The hormone has been shown to be directly absorbed by the cell. It is considered that the hormone then exerts its effect on certain specific reactions of the cell. Whether it exerts its force on the specific reaction directly, or by an intermediary step of influencing the enzyme system, is not known. The hormone may act by speeding up the reaction or by retarding the reaction. It is probably easier to consider the effect as occurring by some action on the enzyme system. A single hormone may influence, rather directly, several different reactions; as an example, consider the many effects of the estrogens.

To maintain normalcy of internal environment, certain chemical reactions must at times be speeded up when available materials are too high in concentration in the body fluids; or, these reactions must be slowed down at times when the available materials are low in supply. This dynamic control of metabolism is considered to be under direction of the various hormones of the body. To control such a problem in metabolism, hormones of antagonistic properties must be present. In the absence of both hormones, the chemical reaction proceeds along at a steady rate to completion under the control of the enzyme system alone. Hormones can affect only the rate of this reaction; the reaction can proceed without the hormone. Maintenance of a stable internal environment calls for a nicely balanced control of the secretion of these antagonistic hormones. The need of the hormone is best noted during stress or strain on the organisms. This effect of stress and strain can best be shown in the Houssay animal. An animal made diabetic by pancreatectomy, can be made to have relatively normal glucose utilization if an adrenalectomy is performed on the same animal. This forcefully presents the antagonistic effects of insulin and certain adrenal extracts on the control of glucose utilization. If this animal is placed under the "stress or strain" of forced feeding, hyperglycemia develops. If the animal is put through a starvation regime, hypoglycemia develops. This demonstrates well the need for these two hormones to control internal environment even under relatively mild conditions of stress.

The patient with diabetes mellitus shows constant hyperglycemia at all times because of the unrestrained effect of the adrenal and pituitary hormones on the reactions of glucose utilization. The patient with Addison's disease shows rapid glucose utilization and hypoglycemia during fasting because of the unopposed insulin effect accelerating glucose utilization. Over- or under-secretion of a hormone, then, can produce a change in the net concentration of certain vital metabolites in the body, thus affecting the internal environment. These defects produce recognizable disease processes and are considered as being endocrinopathies.

Diabetes is a condition in which the homeostatic adjustment of glucose levels in the body is defective. It is a condition in which the available level of glucose in the body is above normal; in other words, a balance between utilization and availability is not maintained.

Whereas twenty-five years ago it was felt that insulin was the chief factor in the control of glucose levels in the body, now it is known that other factors are at play and that the process is a complex relationship of several antagonistic factors that control glucose level. Hormones excreted by the anterior pituitary, adrenal medulla, adrenal cortex, thyroid, and two hormones from the pancreas, play an important part in the maintenance of normal glucose levels. Antagonism of action of various hormones, nicely balanced, one affecting the level upwards, and the other affecting the level downwards, produces the constancy of concentration of glucose in the body.

Houssay, with his experimental studies on animals mentioned above, was the first to upset our mental smugness regarding the question of diabetes and insulin, and this was one of the first steps in our realization of the dynamic forces that influence the course of metabolism, especially in glucose metabolism. The fact that two hormones are antagonistic in the control of a certain specific and important chemical reaction, is a concept of utmost importance.

Cory and his collaborators helped to further our knowledge of the effect of hormones and their relation to specific chemical reactions and specific enzyme systems. Cory's work was with the enzyme hexokinase. Glucose, to pass through a cell membrane, must have a phosphate radical attached to it. Hexokinase is the enzyme concerned with this phosphorylation reaction in which glucose is changed to glucose-6-phosphate. Unless glucose can get into the cell, it cannot be utilized, and so phosphorylation is the first step in the metabolism of glucose. Cory showed that insulin speeds up the phosphorylation reaction and that certain adrenal extracts tended to slow down this reaction. The reaction proceeded at a pace dependent upon the relative amounts of insulin and adrenal extract present. In relative excess of insulin, phosphorylation was speeded; in relative excess of adrenal extracts, phosphorylation was retarded. This is one of several points in the metabolism of glucose that insulin has been shown to be active, and by some is considered to be the most critical defect in the problem of diabetes.

Before continuing further with the discussion of the defects in diabetes, a few words must be said about a newer concept of protein and fat metabolism. The interdependence of carbohydrate, protein, and fat metabolism, is being realized today. By various reactions, all three substances are broken down to simple chemical substances of 2 carbon atoms, which are then directed into the same chemical reaction to be converted to energy with the waste products, carbon dioxide and water being formed. In other words, the same set of reactions, the same enzyme systems finally act to convert carbohydrate, protein, and fat to energy. Carbohydrate is the chief source of material to supply this cycle and to produce energy. However, in the absence of sufficient carbohydrate, energy can be produced by the breakdown of fat and protein. Similarly, it has been shown that these degradation products of fat, protein, and carbohydrate can be reconstituted back up the scale to fat, protein, and carbohydrate. In other words, fragmentation products from glucose, instead of being used for energy, can be resynthesized into fat and into protein. Apparently this is the chief route through which fat production occurs in the body aside from the ingestion of preformed fat. This close correlation of the metabolism of these three substances has brought about the term, "The Common Metabolic Pool." In brief, the production of energy in the body is dependent upon a close correlation of fat, carbohydrate and protein metabolism; the end stage of metabolism in all three groups is the same; any of the three can apparently be synthesized from fragmentation products of the others.

Continuing the discussion of pure glucose metabolism, after glucose-6-phosphate has been formed, two courses or reactions are open. It may go through a reaction and polymerization to form glycogen. This process is readily reversible. Or, by a series of reactions, the glucose molecule is split down to a 2-carbon-atom molecule, and then enters the energy producing cycle common to it, fat and protein (called Kreb's cycle or the Tricarboxcylic cycle). In the absence of insulin, the phosphorylation reaction is so slowed down that the amount of available glucose in the blood stream and body fluids increases, because utilization does not equalize with availability or supply. So, the glucose builds up in the body fluids until it finally reaches the renal threshold and the excess glucose is spilled in the urine. The picture is that of diabetes. In event the adrenal hormone is low in amount and insulin is normal in amount, phosphorylization goes on at an increased rate until the available glucose reaches a low level (hypoglycemia of Addison's disease). It is a fine balance of the amount of each hormone present that maintains normal glucose levels. As the blood sugar rises, apparently more insulin is secreted to help increase utilization of the glucose. As glucose levels drop, insulin supply decreases and the adrenal hormone tends to cut down utilization of glucose and thus prevent development of hypoglycemic levels. Cortisone-like substances of the adrenals also tend to increase blood sugar levels by increasing the rate of gluconeogenesis,or the conversion of protein to sugar. Insulin encourages the formation of fatty acids from glucose, and when cellular needs for glucose are met, this process tends to reduce the supply of available glucose to normal. Thus, the hormones by balance and counter-balance, maintain normal glucose levels.

Another question arises — is diabetes an entity of absolute insulin deficiency, or is it a condition of relative insufficiency in which the influence of excessive antagonistic hormones overbalance the insulin effect? This cannot be definitely proven until methods of measuring the concentration of insulin in body fluids and tissues are available. To date, this measurement is extremely difficult to determine. However, the general concensus of opinion is that a true insulin deficiency exists in most cases of clinical diabetes. Albeit, insulin is the mainstay of treatment. Whether the deficiency is absolute or relative, the deficiency must be made up by giving insulin. Persons having pancreatectomy for some disease or other usually can be controlled on 30-40 units of insulin. Why do some diabetics require 60, 80, 100 units of insulin? Conceivably a condition of both absolute and relative deficiency is present here.

The understanding of ketosis has been bettered by the concept of the common metabolic pool. It has long been known that ketosis develops during starvation (decreased availability of gluocse) and in diabetes (decreased utilization of glucose). When considering the common metabolic pool and the Krebs energy cycle, one can see the similarity of these conditions. Carbohydrate is the main source of "fuel" for this energy cycle, thus sparing the breakdown of fat and protein to meet the energy requirements of the body. The degradation product of fat is slightly different than that of glucose, but still enters the same cycle. The end product of fat metabolism cannot be utilized as readily as the end products of glucose metabolism. Thus, as glucose is less and less available, fat is broken down more in order to produce energy. There seemingly is a rate above which these "fat products" cannot be utilized. In the absence of glucose products, and in the absence of rapid enough fat utilization to meet the energy requirements of the body, fat breakdown is for some reason further stimulated in the liver, with the result that production is much more rapid than utilization. These degradation products of fat are called ketone bodies, and their excessive presence in the body fluids produces ketosis. Glucose is present in high concentrations in the body fluids, but since it cannot be utilized, "starvation exists in the lap of plenty." In an attempt to produce glucose-like products for use in the energy cycle, protein is broken down furnishing end-products similar to glucose. The result is that excessive protein breakdown occurs, and negative protein balance ensues. This again shows the close interrelationship of metabolism of carbohydrate, fat, and protein.

Accompanying ketosis, other factors occur. Glucose is excreted in increasingly large amounts in the urine, taking with it large volumes of water. As this polyuria develops, sodium is lost in the urine thus depleting the amounts of sodium in the plasma and intercellular fluid. As the electrolytes disappear from the intercellular fluid, potassium comes from the cell to the intercellular fluid and into the plasma to maintain osmolarity between intra - and extra - cellular fluids. Large amounts of potassium are then excreted in the urine. The blood potassium level is increased because of the shift of potassium from cell to extracellular areas. Cellular dehydration occurs as fluid shifts from cell to intercellular space.

Because of the increase in ketone bodies (acid substances) the pH of the plasma tends to become lower, and extreme stress is placed on the buffer system of the plasma and intracellular space in order to maintain a normal pH. Acidosis develops. In the presence of acidosis and ketosis, the efficacy of insulin is decreased, and whatever insulin is available is less efficient. Thus a vicious circle is set up in which, as the ketosis becomes more severe, insulin that is available is less effective. This further promotes increase in the severity of ketosis.

The problem of ketosis is then accompanied by: (1) high glucose levels in body fluids; (2) dehydration of both intra-and extracellular spaces; (3) loss of body sodium; (4) loss of intracellular potassium; an increase in extracellular potassium levels, and excessive potassium excretion; (5) an increased breakdown of protein with a negative protein balance; (6) increased amounts of ketone bodies in the body fluids; (7) an excessive strain on the buffer system of the body to maintain normal pH, exaggerated by loss of base in the form of sodium and potassium; (8) decreased efficiency of insulin in the presence of ketosis.

This is the train of events from insulin deficiency, and the factors to be considered in the treatment of diabetic ketosis or acidosis. As acidosis increases, oxygen utilization in the brain is reduced; if reduced severely enough and long enough, irreparable damage can be produced and death will ensue.

The rationale of treatment is to reverse the adverse reactions that have developed. Since the prime mover of the whole process has been deficient utilization of glucose, this must be remedied above all. Insulin in large doses is given (ketosis reduces the efficiency of insulin) until such time as blood sugar determinations show that glucose is being utilized (lowering of blood sugar levels). Concomitantly, fluid in the form of normal saline is started to replace fluid and sodium deficit. Although the total glucose in the body is depleted by glycosuria, glucose administration should be withheld until such time that insulin is proving effective. If glucose is given before this time, the blood sugar is of no direct value in indicating that glucose is being utilized. As the blood sugar comes down, glucose can be administered and sufficient amounts of insulin are still given regularly to insure continued glucose utilization (as evidenced by blood sugar, and urine tests).

As glucose is utilized, hydration is continued, and sodium is supplied, potassium tends to reenter the cell with a resulting depletion of the blood level of potassium. If this level becomes too low, muscular paralysis and cardiac weakness can develop. Since large amounts of potassium have been lost from the body during development of ketosis, a deficit of total body potassium exists. Untreated ketosis, or early in the treatment of ketosis, the blood potassium levels may be high or normal, but as treatment progresses, hypokalemia develops. This occurs clinically 3 to 4 hours after effective vigorous treatment and glucose administration with utilization is occurring. At this time it is well to administer potassium with the I.V. fluids, or orally, if the patient is able (orange juice, gruels, salty broth are good sources—KC1 can be added to the fluids taken by mouth).

As glucose is utilized, fat breakdown is slowed down, ketone bodies are excreted in the urine, and ketosis slowly disappears. Also as glucose is utilized, protein breakdown is stopped, and positive protein balance returns. Body fluids, sodium and potassium are replaced. Thus the whole process of ketosis is reversed by (1) instituting glucose utilization with insulin, and (2)) replacement of lost electrolytes and fluids.

Much is still to be learned regarding the exact levels of action of insulin in the metabolism of carbohydrate, fat, and protein, and about the exact nature of the role of the antagonistic effects of other hormones. Also, the problem of a true insulin deficiency with a "pure" diabetes, or a relative insulin deficiency and the "diabetic syndrome" (seen in pituitary and adrenal tumors or hyperplasia, excessive cortisone administration, certain case of hyperthyroidism, obesity, etc.) must be cleared.

The problem of diabetic complications, especially those of the eye, heart, and kidney, are not well understood. Extensive study in this field is needed, and is the greatest challenge in the care of the diabetic today. It is truly disheartening to see diabetics, with disease of 12 to 15 years duration, come in with these complications for which we have little to offer in treatment or prevention.

CONCLUSIONS

1. An attempt has been made to interpret rather freely, present concepts of metabolism, and to present them rather dogmatically without reference to conflicting viewpoints. The above concept is held by the majority, and will be a good working basis to interpret further progress in the field.

2. The newer concept of the dynamic forces in body metabolism have been emphasized. An attempt is made to show the "fluid nature" of body chemistry—the balances and counterbalances that come into play to maintain normal "internal environment."

3. The rationale of the treatment for diabetic ketosis has been briefly outlined as interpreted by newer concepts of metabolism.

4. The ideas brought forth are interpretations of many men's works and contributions, some colored by personal experience and others simplified to give a clearer understanding of these complex problems.

The attached bibliography is for reference to more detailed accounts of material summarized in this paper.

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Basing their conclusions on the study of a series of surgical operations performed on patients suffering from cardiac disease, Purks and Chalmers (South. M. J. 44:303, 1951) proposed the following set of principles as a guide in dealing with such patients:

"1. Surgery should not be undertaken when there is any evidence of active cardiac infection such as active rheumatic or luetic heart disease.

2. Surgery should rarely be undertaken in the presence of a recent coronary closure.

3. If congestive heart failure is present, surgery should be delayed until adequate compensation is established. This implies adequate control, not simply rapid digitalization.

4. The presence of auricular fibrillation increases the risk significantly. Other arrhythmias are less likely to complicate the risk.

5. Patients with aortic valvular disease, whether aortic stenosis or aortic insufficiency, represent significantly poorer risks than do the patients with mitral valve disease.

6. Syphilitic heart disease offers a significantly poorer risk than rheumatic heart disease.

7. Evidence of renal failure greatly enhances the risk.

8. Not the least among the factors which influence the risk is the question of sick room psychology or the attitude in which the patient approaches the surgical procedure. A sincere spirit of conservative optimism must prevail or else the element of fear on the part of the patient may determine a mortality."

The Control of Diabetes

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This author draws a comparison between three schools of thought relating to the control of diabetes, namely, the "free-diet" school, the "liberal" school, and the "school of strict control". The last of these is the older and embodies the thinking of most of those who are specially interested in the care of patients with this disease. Doctor Margolin then outlines the important features of a regimen illustrating the strict control ideas. He discusses diet, insulin, exercise, testing, and education of the patient, in a very clear-cut manner.

EDITOR

ELEMENTS IN CONTROVERSY

What constitutes adequate diabetic control? This is the question which is the basis of a major controversy among authorities of this disease-state, a controversy which has been going on for 15 years, and which at times has reached painful proportions. There is no disagreement on the objectives of treatment: The ideals sought for are maintenance of normal health, free from symptoms, and with sufficient reserve to withstand medical and surgical emergencies; avoidance of progression in severity; and prevention of late vascular complications if possible, or at the least, the delay and minimization of such complications. The dispute relates itself to the degree of control necessary to achieve these aims.

The varieties of opinion current on this question may be roughly classified into three schools:

1. The free-diet school; E. Tolstoi(1), chief promulgator. This school of thought advocates free choice of diet without restrictions of any kind, with sufficient insulin to keep the patient asymptomatic, free from acetone, and maintaining his normal weight. Glycosuria and hyperglycemia are disregarded.

2. The liberal school* led by George Guest(2, 3): The patient is allowed free choice of diet but is restricted on foods with high carbohydrate content. That this school of thought is mainly adhered to by pediatricians† is readily understandable, in view of the fact that the juvenile diabetic is notoriously unstable: He tends to fluctuate between hyper-and hypoglycemia, and exhibits frequent ketotic manifestations, despite all attempts at control. It is evident that diet-insulin balance is not the only factor implicated here; endocrinologic imbalance must also enter into the picture.

3. The School of Strict Control(3, 4); Dating from the pre-insulin and early insulin eras: The diet is quantitatively restricted to suit the need of the individual patient. Insulin dosages are carefully adjusted, in time and amount, to keep the patient in as nearly a normal metabolic state as is possible to achieve. Careful and frequent testing of urines and blood sugars are resorted to, to forestall deviations from good control.

PROS AND CONS

The proponents of strict control, belonging to the oldest school, find themselves in the position of defenders of the "conventional," and are branded as "die-hards" by the liberalistic groups. The free-dieters contend that diet restriction imposes an unnecessary psychic handicap upon the patient, since the provision of a sufficiency of insulin assures an adequate utilization of the needed foodstuffs. They point to the maintenance of weight and the freedom from symptoms as proof of the adequacy of their system of control. Moreover, they aver that, since fully cooperating patients belong to the species of "rara avis," the whole question of diet is purely academic.

To this, the strict control group lamely replies that a minimum of discipline is better than none. They further argue that apparent health in a diabetic, as indicated by freedom from symptoms and maintenance of weight, is not at all an acceptable criterion of the efficacy of the method of treatment; that such objectives are easily obtainable, as witnessed by the length of time, often counted in years, that diabetes may exist, before sufficient symptoms become manifest to call attention to the presence of the disease. The rapid recovery from symptoms on initiation of treatment, is a common experience, and adds to the validity of this argument. They suggest that a more adequate criterion would be that relating itself to the progression in severity. There is much evidence, experimental and clinical, in support of the theory of pancreatic exhaustion produced by hyperglycemia(5), resulting in irreversibility and increasing requirements of exogenous insulin.

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*The diet of this school is often referred to in the literature as "free-diet;" however, there are restrictions on high carbohydrate foods, and attempts are made at full control by insulin.

†Dr. Robert Jackson of Iowa City, an adherent of the strict school of control although handling children exclusively, is a notable exception.

But the liberal group remains unconvinced. They are unimpressed by the interpretation of the evidence presented; the gaps are many and there are reasons to believe that other factors are implicated in the problem of progressing severity. Now, if it could be proven that the late vascular complications are due to the fault in metabolism manifest in the diabetic phenomenon, that would be a different matter. But . . . and they point to the demonstration of Henry Dolger(6) to the effect that retinal complications develop in a 100% of diabetics within 20 years after the onset, irrespective of the type of control employed.

The strict control advocates counter with: "It's true; we are not certain about the etiological factor underlying the vascular changes, but we believe that the metabolic fault is at least partly responsible for these developments." And, being the older group and hence possessors of a numerically superior experience, they go delving into their records and produce proof that contradicts Dolger's demonstration, namely, that the better the control, the greater the delay in the development of complications, and the slower the rate of progress of these complications(7, 8, 9).

The liberalists shrug their shoulders. No answer is forthcoming. They do not possess the statistics necessary to refute the last argument. Their collective experience falls short of the minimal twenty-five year period required to prove their point. Nevertheless, they believe themselves correct in their view, and hope to prove it in due time.

Thus, the wrangling goes on. From the long range standpoint, there is certainly nothing wrong about this; intellectual conflict among people with knowledge and experience challenges minds and provokes action, and eventually leads to the emergence of truth. But, in the meanwhile, the average practitioner, conscienciously striving to do his best for his patient, is kept in a state of confusion and frustration. Limited in time and resources, but wishing above all to avoid error, what course is he to follow?

A SAFE AND SANE PROGRAM

Simple discretion dictates caution in the replacement of tried methods by unproven plausibilities. On the other hand, it is good sense to discard those features of a system which make it top heavy, retarding rather than advancing the best interests of the patient. A practical program of treatment must combine accepted principles with modifications towards simplicity, and with liberalization wherever possible.

Generally considered, it must be borne in mind that no outline of treatment is equally applicable to all patients. There are occasions when concessions must be made. Certainly such concessions are indicated whenever the treatment fails to achieve desired results. Such is the case of the "brittle" diabetic, for instance, in whom complete control is unattainable under any condition. Concessions should also be properly allowed when the system is restrictive beyond need as in the case of elderly patients whose diabetic life span is not expected to extend to the period of late complications. In the arteriosclerotic, the hypertensive, and the cardiac patients, a limited glycosuria and hyperglycemia may be desirable rather than objectionable. In any case, a limited spill of sugar is preferable to the disturbing hypoglycemic reactions. In addition to such group distinctions, we must ever remember that diabetics are individuals. They vary in the disease process, and in their physiologic and psychologic reactions to it and to its treatment. Each patient is a law unto himself, and must be treated accordingly. Judicious consideration must be given to the degree of discipline which would protect his best interests.

It is hoped that none of these statements may be construed as a license for complete relaxation. On the contrary, every diabetic must subject himself to a life of control. The considerations extend only to the degree of control. Paradoxically, our responsibility is greatest in those cases in which control is most easily obtainable; the more mild the diabetic, the more stable, the more likelihood to slow progress and to postponement of complications, the more complete the control that should be exerted. The greatest responsibility of all lies in the direction of early diagnosis and early initiation of treatment; certainly in these cases we dare not slack control, for here we have the opportunity of really great achievements.

The following outline constitutes a method of treatment currently acceptable to those who advocate good control. It is by no means meant to be exhaustive; such is not within the scope of this paper:

1. DIET(10, 11): The diet forms the basis of treatment; without it, insulin cannot be applied intelligently. It must be adequate from all standpoints: The caloric content should fit individual needs; the food elements should be in good balance; and a sufficiency of vitamins and minerals be included in the selection of the food items. Consideration must be given to palatability and to occupational and eating habits of the particular patient. The total daily intake should be divided into three main meals and a bedtime snack, the latter not only being satisfying to the patient, but also providing a substitute for the luncheon served at evening social occasions. The bedtime snack also protects against insulin overaction during the night. Mid-morning or mid-afternoon snacks may be arranged if indicated. The intake should be fairly constant from day to day.

The food portions should be set up in terms of commonly used household measurements, and an adequate listing of items of equivalent values should be provided, to insure variety.* With few exceptions, the usual and normal foods are preferable to commercial diabetic substitutes, the latter being in the main unpalatable, unbalanced, and uneconomic. It should be hardly necessary to add that the diet must be prescribed with a view of keeping the patient at normal weight standards; attempts should be made to correct both obesity and undernutrition.

2. INSULIN(12, 13): The current tendency leans to the use of the intermediate time-acting varieties, NPH being in ascendancy at the present. The daily prescription may be given in a single morning dose, or divided into morning and evening doses to keep the patient on a more even keel. Other insulins also have their uses. The globin variety is equally as effective as NPH in many cases, and may be even more effective in some. Protamine insulin is very useful in the milder cases, and regular insulin is irreplaceable in emergencies. Some patients are best controlled by a mixture of protamine and regular, and others require the addition of small amounts of regular to the NPH or globin. Each patient must be carefully evaluated in his requirements as to the type, the dose, and the timing of administration.

3. EXERCISE: Unless contra-indicated by complicating conditions, no diabetic should be restricted in activity. Exercise enhances his utilization of glucose. He should be encouraged to involve himself in athletics to the limit of his capacity. Over-activity may lead to hypoglycemia, and patients should be instructed to decrease the dose of insulin on the days when excessive activity is expected, or should be provided with extra food allotments on such occasions.

4. TESTING(14): The patient must be instructed in simple qualitative sugar testing procedures, and should be given a program of urine checks in accordance with his needs. The tests should cover several periods of the day, preferably four: before breakfast; before lunch; late afternoon, and bedtime. The frequency of such tests should be advised in accordance with the stability and severity of the diabetic state. The results should be reported to the attending physician on the occasion of the periodic visit. In the event of a major discrepancy, the doctor should be informed without delay.

Supervision by the physician is mandatory; periodic visits must be required, their frequency dependent upon the patient's needs. During each such visit a 24-hour urine specimen should be analyzed for qualitative albumin and acetone, and quantitative glucose. The total sugar spill for the day, plus the information given by the patient on his qualitative fractional tests for the same period, afford the physician the total picture of the patient's status. On the occasion of such visits, the blood sugar should be taken, the most satisfactory information being obtainable from the venous blood, at 2 to 3 hours following a meal. The patient should be weighed, and other examinations made as indicated. A history of hypoglycemic reactions, their frequency, severity, and time of occurrence should be elicited. A complete survey of the patient's physical condition should be made at proper intervals, including investigation of the eyes, peripheral vessels, heart, and kidneys. Team work between the patient and his doctor is regarded as essential for good control.

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*Meal planning booklets, prepared cooperatively by The American Diabetes Association, The American Dietetic Association, and the Diabetes Branch of the Public Health Service, and conforming with these requirements, are purchasable at nominal cost, from the Health Publications Institute, Inc., Raleigh, North Carolina, for distribution to patients.

EDUCATION OF THE PATIENT

With sadness and humility, we are forced to the admission that the cooperative patient, at least as far as the diet is concerned, is unusual if not rare. This is a common experience. Without full cooperation, all our attempts at control are doomed to failure, as far as the major aims of our treatment are concerned. The remedy for this defect lies chiefly in the area of patient education—the the development of diabetics with knowledge and understanding of the physiologic basis underlying their disease and the methods of control necessary to prevent the metabolic errors from occurring and recurring. That such understanding is effective in the long run is indicated by Joslin's report on his 25-year victory medal winners(9) (diabetics of 25-year duration without the slightest evidence of complications), all of whom were consistent in their cooperation. Joslin has frequently remarked on the greater success obtained by treatment of diabetic physicians, as contrasted to that of ordinary patients, as a proof of the value of knowledge and understanding.

A beautiful demonstration of this fact was given at a panel discussion, which took place at the June, 1953, meeting of the American Diabetes Association, in New York City. Six physicians took part in the panel. All were severely diabetic, some exceeding 25 years duration, with insulin requirements ranging up to 120 units per day. Each, eminent in his field of practice, finds himself frequently called upon to travel extensively for participation in scientific and organizational gatherings. The chairman propounded questions and the panellists responded with good natured humor and engaging candor. Their frank statements sounded at first like a "confession of sins." It soon became evident, however, that these were not "sins" at all, but deviations made necessary by circumstances, such errors being subsequently corrected with due intelligence. For instance, as guests at banquets, they are not always in position to control the type of food served; but, by manipulating the amount of bread used, and by eating only part of the portions served, they are able to keep their food intake within the prescribed bounds. Thus they manage to partake of everything served, graciously and without the appearance of being ill-mannered. Further correction is made by an additional dose of insulin, should such be indicated. On trains and in hotel rooms, they sterilize their syringes and needles by immersion in alcohol, and find this a perfectly safe procedure. They modify their insulin intake as indicated by frequent simple testing procedures. Their state of health and alertness certainly emphasizes the efficiency of their control, tempered as it is by intelligence.

Obviously, the degree of knowledge and understanding achieved by these diabetic physicians is not possible in the majority of our patients. Yet, enough could be accomplished, for all practical purposes, by educational processes properly administered. The physician in charge of the case is responsible, through his nurses and dietitians, for the training in the necessary skills. This should include the knowledge of the values of food and of insulin, the management of syringe and needles, and the techniques of administration, the degree of activity permitted, urine testing, etc. The patient should be encouraged to be self-reliant in all phases of his care. The attending physician should also regard it as his responsibility to introduce his patient to broader fields of knowledge, such as the literature available for the lay diabetic, (e.g.—Diabetic Manuals, the A.D.A. Forecast,* etc.). The periodic visits provide added opportunities for education, as well as for straightening out erroneous conceptions that may have developed.

The Diabetic Camps have proven themselves to be a fruitful source of education, as well as of relaxation. At present, such camps are available only for children, but there is a growing sentiment that similar provision be made for adults as well. Regional lay groups, affiliated with the American Diabetes Association can be of immense benefit in providing opportunities for gatherings of diabetics, and the interchange of ideas under proper guidance. Classes for diabetic instruction can best be handled by such groups. In addition, lectures aimed at the lay level can be very stimulating. Affiliated associations are growing in scope and in number throughout the United States and Canada.

SUMMARY

1. The controversial aspects of diabetic control are discussed.

2. Good control is favored, and a practical program of treatment is outlined.

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*A bi-monthly publication of the American Diabetes Association, 11 West 42nd St., New York 36, N.Y. Subscription price, $2.00 per annum.

3. Education of the patient is stressed as a means of attainment of good control. Available educational facilities are pointed out.

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Lesions of the Feet in Diabetes

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The author has summarized briefly the lesions that may be seen in the feet in diabetic patients. He has divided these into four categories. He deals with the pathogenesis, clinical aspects, treatment and prognosis of lesions in each category.

EDITOR

One of the most important problems in the treatment of diabetic patients is that of the associated diseases of the feet. To a large extent the literature and physicians' thinking have grouped these lesions together under the general heading of gangrene with infection. Experience with a thousand diabetics over a period of thirty years indicates that a subdivision of these lesions offers many advantages. These cases can be divided into four groups: those with penetrating ulcers; those with vascular occlusions; those with abscesses; and those with neuropathic lesions.

The penetrating ulcers appear to be twice as common as those with vascular occlusions. The typical case occurs in an older, uncontrolled diabetic; however, all of these lesions may occur in well controlled diabetics. There may be a high renal threshold for glucose with high blood sugar, but with little glycosuria. Fungus infections of the feet are usually present, and the feet have been illy kept. The initial lesion is the usual fissure between the toes, or inflammation about a corn, a hangnail, or a callus.

Later, pain brings the patient to the physician. By this time there is a discharging ulcer with considerable inflammation which tends to be localized. The arteries of the feet often pulsate normally in this type of lesion. X-ray examination of the foot, at this stage, is likely to reveal no abnormality. Later there appears, at the base of the penetrating ulcer, a localized osteomyelitis. This may extend, and produce a pathological fracture. Sequestration may occur. There is often an associated neuritis of the involved extremity. Injuries and hot water bottles are not often causitive factors. With conservative treatment these lesions tend to heal slowly. Controlling the diabetes is of prime importance. One must be certain that hyperglycemia is controlled, as well as glycosuria. The feet should be kept elevated, and should be kept thoroughly clean. Antibiotics should be given, and are most helpful. These lesions seldom go on to extensive gangrene. In a very occasional case spontaneous amputation of the toe has occurred, and very occasionally a toe has been amputated. Almost without exception, however, these cases have healed and, with proper care of the feet, do not tend to reoccur.

The etiological factors in the penetrating ulcer, in all probability, include more than one factor. Neuropathy, fungus infection, arteriosclerosis, poor diabetic control, and poorly kept feet all play a part.

Gangrene, dependent on vascular occlusion, is a quite different lesion. These cases also occur in the older diabetics, in those whose diabetes has not been well controlled, and whose feet have not received proper care. Often there has been long-standing evidence of ischemia in the feet with decreasing arterial pulsation. increasing redness in the dependent position, and palor on elevation. The threatened extremity is usually cold. Observation over a long period of time indicates that a level of decreased temperature in the extremity usually preceeds for months the onset of symptoms. This level is helpful in determining where to amputate if gangrene occurs. This lesion is often preceded by mild or severe neuritic pain in the leg. Infected corns, calluses, blistering the feet with a hot water bottle, and injuries to the feet from any cause often precipitate the gangrene. The gangrene usually occurs rather abruptly with severe pain in the involved area. A segment of the foot or leg first becomes painful, red, swollen, and shortly necrosis of the skin develops which goes on to gengrene. X-ray in these extremities is usually negative for bone lesions but shows vessel-sclerosis. Osteomyelitis does not occur, and infections do not necessarily precede the onset.

The treatment of gangrene has in almost all cases been amputation. Delay of amputation in gangrene has no advantage. The use of antibiotics and the control of the diabetes are of prime importance. Buerger exercises, reflex vasodilation ,and vasodilating drugs are of value in the prevention or postponing of gangrene.

A third and less common lesion is that of abscess. In this lesion, the circulation may be only moderately impaired, and the arteries may not be occluded. Abscesses respond well to treatment which should consist of rigid diabetic control, antibiotics, and free and early surgical drainage.

The fourth type of lesion, and one which is very uncommon, is that of neuropathic bone changes. Apparently these occur about once in one thousand cases. The history is that of long standing, often poorly controlled diabetes in an older person. There is numbness, tingling, and pain in the early stages. The patient comes complaining of a deformed foot. On x-ray examination the deformity is, in most respects, similar to the Charcot joint of syphillis, or of syringomyelia. X-ray reveals demineralization of the bone of the foot and displacement of the metatarsals. This results in a characteristic deformity. X-ray findings are present for some time before the deformity appears. These deformed feet may be quite painless, and there is no evidence of acute inflammation. The treatment in these cases is conservative, and should include rigid control of the diabetes and orthopedic measures to remove the stress on the feet.

Most of the lesions of the feet of diabetics will fall into one of the above classifications. Treatment and prognosis are quite different in each of the several groups. If the physician will think along these lines, it should be helpful in the early determination of the nature of the lesion and of the type of treatment indicated.

The Springdale Camp for Diabetic Children

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These authors discuss Springdale Camp from various angles. Some information is given about its inception and development. Its sources of revenue, its location and surroundings, and information about its makeup are related. The method of staffing the camp, recreational activities and the medical regimen are touched upon briefly. Credit is given to a number of individuals who have aided in promoting and running the camp.

EDITOR

The Springdale Camp for Diabetic Children is now a thriving three-year-old, but it took a great amount of effort by many people to get it born and to carry it through the hazards of infancy. Foremost of these volunteers, though the last to claim the credit, is Dr. Floyd L. Rogers of Lincoln. It was he who conceived the idea of having such a camp, and who has guided it through the early years.

A question that arises at this point: Are there enough diabetic children in Nebraska to justify such a camp? Among the 348,684 children of Nebraska under fifteen years of age(1) one may expect to find about 130(2) with diabetes.

The object of such a camp is threefold: 1. To offer the diabetic child the recreational advantage of a summer camp, an advantage of which he otherwise is deprived; 2. to instruct the child in the care of his disease and to help him become self-reliant; 3. to give the parents of the diabetic child a vacation from their constant responsibility.

What sort of an organization does a camp like this require? The staff should consist of two departments. The recreational portion includes a camp director. For this post we have been fortunate in obtaining, from the Nebraska State Health Department, the services of Miss Anna Smrha, food economist. Miss Smrha not only oversees the camp, but she also buys the food, hires the cooks, cooperates with the dietitian, and gives talks all over the state between camping seasons. In short, she is indispensable. As financial secretary, we have had the services of Mr. Herman Siefkes, C.P.A., of Lincoln. An adequate corps of picked counsellors have been provided by the Girl Scouts and Boy Scouts of America.

The medical staff for thirty-five campers, last June, included two internes—one a 1953 graduate of Creighton Medical School, the other a third year student at Creighton. In 1951, the first year of the camp, the thirteen patients had for their doctor, Harold Margolin, M.D., just graduated from the University of Nebraska. The next year, with eighteen patients, Harold Gentry, M.D., of Scottsbluff, also a Nebraska graduate, found himself busy both day and night. In such a concentration of juvenile diabetics, young doctors learn as much in two weeks as they are likely to learn in ten years of practice.

For camp nurses, in 1953, we had Miss Virginia Demaree, R.N., just graduated from Nebraska, Miss Mildred Caup, R.N., of St. Catherine's Hospital, and Mrs. Sally Hellsman, R.N., a public health nurse from Scottsbluff. Finally, a medical technician from Lincoln General Hospital gave us invaluable help with blood sugars and blood counts. Such a large paid-staff is expensive, but they were all busy every day, and most of the nights.

The visiting staff, all members of the Nebraska State Medical Association, the West Central Diabetic Association, and the Creighton or Nebraska faculties, included Drs. Albert Murphy, Robert Long, Morris Pepper, Robert Hankins, Edward Langdon, Harold Gifford, Michael Crofoot and Morris Margolin, all of Omaha; Drs. Floyd Rogers and Robert Bailey of Lincoln, and Dr. Sanford Rathbun of Beatrice. One of these doctors visited the camp each day, reviewed the medical situation with the internes, and usually gave a short talk to the children.

Where is Springdale Camp and how much does it cost to run it? Where does the money come from?

Springdale is at Camp Catron, two miles north of Nebraska City. Surrounded by fruit orchards, it consists of fifty beautiful wooded acres on which are located several permanent buildings. One of these is a completely equipped mess hall. The children sleep in floored tents, swim at the Nebraska City Municipal Pool (thanks to the Ladies Auxiliary), go to church in Nebraska City, but spend most of their time on the camp grounds. The Springdale Camp Association has been able to rent this whole area from the Girl Scouts of America for two weeks each June, the cost being only a fraction of what would be necessary to buy and equip such a site.

The money comes from the people of Nebraska by donations. The original capital was raised by the Nebraska Junior Chamber of Commerce. Dozens of other organizations and service clubs, such as the Elks, the World Herald Good Fellows, the Junior League of Omaha, as well as many individuals, have contributed to make up the annual deficit. For the children who can pay, the fee is $25 a week, but we have never turned down a diabetic child because of inability to pay. Incidentally, Springdale is the only such camp between Chicago and California, except for one in Texas and one in Kansas. We had campers, this year, from many places in Nebraska, as well as from Iowa, South Dakota, Colorado, Wyoming, Minnesota, and Illinois.

What is the policy of the medical staff towards diabetes? This is best shown by describing several typical days of camp life. On the opening Sunday, June 7th, the resident staff were prepared to serve noon and evening meals, to test urines, and to give insulin. Five visiting physicians came down to help the internes examine the thirty-five children. We were on the lookout for contagious disease, but as later events proved, we must have missed a red throat. At the last table in the line the directing doctor was stationed. He determined the insulin dosage and the diet, after consideration of the history provided by the family physician, and a conference with the parents. He does not arbitrarily change the type or amount of insulin prescribed by the family doctor. Experience has shown that certain patients need 5 to 10 units less insulin while in camp than at home, because of the physical activity. Even if they stay out of organized games they still have many hills and dales to trudge over in their daily round.

Each of the children is fed a measured diet served cafeteria style. This would be a tremendous task if it were not for Dr. Ruth Leverton of the University of Nebraska, camp dietitian in 1951 and 1952. Doctor

Leverton instituted a series of diets suitable for children, the caloric values of which range from 1,800 to 4,000(3). The American Diabetic Association diets, designed for use with exchange lists, served as the models. The directing doctor needs only to select a diet that provides the proper caloric value, such as ADA No. 6 (2600 calories). As the child passes through the food line, later, with a No. 6 on his tray, the servers give him the number of items assigned to that number by the dietitian's plan. A number 12 would get the same food, but more of it. This assures that meals are served on time and rapidly.

Once the child's regimen has been established, he is taken under the wing of one of the counsellors, each of whom is coached to carry a thermos full of orange juice for use if a child begins to act strangely. The counsellors soon become expert at detecting insulin reactions. The children have no chance to steal food and, on the whole, are very cooperative. I have had little girls point out wild strawberries, which they could not eat because of their dietary restriction.

It is a practice to have some responsible adult with each group and in each tent. The swimming sessions at the Nebraska City Pool took place an hour after lunch, were guarded by at least ten adults, and caused us no trouble. Each child brings a urine specimen to the dispensary four times a day: before breakfast, mid-morning, mid-afternoon, and before bedtime. Clinitests, which the children soon learn to do themselves, are run on these specimens. Each child had three or more blood sugar determinations during the fortnight. Insulin is given just before breakfast, by the nurses. Though we do not trust them to measure the dosage, all the patients learn to give their own injections, even the eight year olds.

Recreational activities, such as baseball, archery, nature hikes, craft work, square dancing, campfires, games, and stories fill in the day.

What sort of difficulties did we meet? Minor insulin reactions were common, especially after ballgames on hot days, or following square dances in the evening. Our talks to the children just before lunch could not be much longer than fifteen minutes or reactions resulted. In 1952, we had one lad go into a convulsion despite the fact that he had swallowed over a pint of sweetened orange juice. Dr. Harold Gentry administered dextrose by vein (all the internes carry sterile syringes for this purpose). The reaction ended. The orange juice was vomited; it had not been absorbed because it had failed to pass through the pylorus.

The girls gave us some trouble. We had one who haunted the infirmary with a series of complaints, the root of which proved to be a "crush" she had on our personable young interne. Another, who kept saying, "I'm having a reaction," proved to have a blood sugar over 400 mg. per cent, at these times. She was simply envious of the girls lying on cots in the infirmary. It was on the girls' side of the camp that our epidemic of sore throat infection, characterized by headache, vomiting, fever, red throat, and elevated white blood count, got started and spread. The original case went into acidosis and precoma. We had no intravenous fluids, but the nurses stayed by her bed for twenty-four hours, spoon feeding her. We gave insulin according to urine tests, plus penicillin. She recovered. She then wrote to her parents asking that they come and get her, but when they appeared two days later, she wanted to stay until the end of the camping period. Other cases of this illness were given pencillin injections promptly, and serious complications were avoided.

Shortly after dismissal, a letter about each patient was sent to the referring physician summarizing the patient's course while at camp. Each patient was instructed to report to his doctor within a week after camp's end.

Did we attain our objectives? We certainly gave the parents a vacation because we started with thirty-five campers, and finished with the same number. As for educating the patient to understand his disease, it is of interest that all our troubles this year were with new campers. With those who returned from 1951 and 1952 (and there were brittle diabetics among them) we had no major difficulty. Children adjust much better to their diabetes after seeing others "in the same boat." Most of them gained weight and self-reliance. Some are already talking about next year. An occasional child seemed to resent the regimentation.

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Management of Common Eye Conditions*

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Since it is paramount that the patient's reliance in his doctor be as complete as possible, it is essential that everything be done to establish and maintain his confidence. Perhaps nothing tends to shake this confidence more than to have the statements of the referring doctor regarding prognosis or treatment, changed or repudiated by the consultant.

In order to unify our ideas about the modern management of some eye conditions commonly seen first by the general practitioner, it seems worthwhile to discuss our present day concepts so that the general practitioner and the ophthalmologist can tell the patient essentially the same story. Not only will the patient's confidence be increased but the doctors will be saved much embarrassment.

SQUINT

One of the extreme disconcerting situations encountered by eye-men is the lack of proper management of strabismus or squint. We continually see cross-eyed children whose parents have been told that they would probably "out-grow" it, or if not, they need not be operated until they are 8 or 10 years old. A child does not "out-grow" a squint and if operation is so long delayed a functional result is impossible. Of course, the eyes may straighten spontaneously later, but only after the vision of one eye has become so defective from suppression that it can not be restored.

It is normal for the eyes of infants to wander and often to cross for the first six months. After that age, however, the child needs prompt attention as soon as strabismus is discovered.

There are two kinds of squint. The paralytic, in which there is a limitation in the rotation of the eye, and in which the amount of deviation varies with the direction of gaze; and the non-paralytic, in which the angle of squint is always the same in all directions of gaze.

It is with the non-paralytic group that we are chiefly concerned. A portion of these are due to excessive convergence innervation resulting from an excessive amount of accommodation in a far-sighted child. These accommodative squints usually appear at approximately two to four years of age, when the child starts to use its accommodation to look at near objects. The deviation is usually of small degree, increases when looking at close objects or when the child is tired, and tends to disappear when correcting glasses are worn. Since most of these cases of accommodative squint can be cured if treatment is instituted early enough, the physician's responsibility is to see that there is no delay in starting the treatment. The earlier the treatment is instituted, the better the result will be. There would be no accommodative squints if every child were examined and glasses prescribed to correct the refractive error as soon as the squint was noticed. The danger in delay is that suppression develops to avoid seeing double. If this persists it causes amblyopia, or lack of vision, in the squinting eye. If uncorrected, amblyopia becomes set and the child has poor vision for the rest of his life. The treatment, therefore, consists of early correction of the refractive error, occlusion of the fixing eye to correct suppression and amblyopia, and then attempts to develop fusion by orthoptic exercises. Cases not benefitted by this type of treatment, certainly by the time they are three years of age, should be corrected surgically.

There is another group of squints which usually appear at birth or shortly thereafter, and which seem to be due to an innervation factor, since most of them disappear under general anesthesia. The parents nearly always give a history of previous illness or injury. The squint is generally marked, that is over 15 degrees, is equal for near and far, and is not affected by wearing glasses. The majority of these children alternate the use of the eyes and the vision in the two eyes is equal. Nearly all of these cases require surgery and this should be done early. It is wrong to permit the parents to think that glasses will be beneficial in this type case.

Some children with vertical muscle defects resort to tilting of the head in order to level their eyes. This may lead to structural body changes—such as a higher shoulder or twisting of the spinal column. Some cases have been diagnosed as congenital wryneck and have had the neck muscles cut. Before such an operation is performed in these cases, the child's eyes should be examined by an ophthalmologist for a vertical muscle imbalance. If present, it's early correction allows the skeletal and postural development to proceed normally.

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*Read March 24, 1953, at the Annual Scientific Assembly of the American Academy of General Practice, St. Louis, Mo.

Eye muscle operations should not be feared. Parents are often relieved to learn that the muscles are attached to the outside of the eyeball, on the sclera, and, since the interior of the eye is not involved, there is no danger to the eye or its vision. Also, since absorbable sutures are used they do not need to be removed.

It should be explained to the parents before surgery that at times a muscle does not pull the same in its new location as it did in the original one, and that therefore it may be necessary to do more than one operation before the result is entirely satisfactory. This is especially true where the angle of squint is large.

We should not be satisfied with only a cosmetic result, but measures should be instituted early enough so that fusion is developed, giving a normal binocular function. Proper alignment of the eyes by surgery is often followed by the spontaneous development of normal fusion and, if not, it allows a much better opportunity for fusion training by orthoptic exercises. We have all seen the wonderful psychological effect that correction of a squint has on a child, but how much better it is if the child never has to know that he ever was different from others. Every squint should be cured, if at all possible, before the child reaches the age of remembering, and certainly, before he starts to school where he will be exposed to the thoughtless, cruel remarks, and even ridicule of his playmates.

SLOW, PROGRESSIVE, NONPAINFUL LOSS OF VISION IN ADULTS

One of the common mistakes in diagnosis is with reference to those cases in which there is a slow, progressive, nonpainful loss of vision in adults. All too often we see patients who have been told that they have a cataract, and that when they cannot see to get about they should have an operation,—who, in fact, have chronic glaucoma. When they present themselves for operation it becomes our painful duty to tell them that their vision has failed as a result of glaucoma and that it cannot be restored by any means. They often ask "Suppose I would have come sooner? Would it have made any difference?" . . . and to be truthful we have to say "Yes".

We must remember that even when the lens is grossly opaque and the diagnosis seems certain, the increased pressure of glaucoma may also be present, and, through damage of the nerve, may be causing loss of vision and visual field that cannot be restored. The chief thing to remember is that when there is a slow, progressive, nonpainful loss of vision in adults over forty years of age, we must be suspicious of glaucoma until we have proven otherwise.

CHRONIC GLAUCOMA

In cases of chronic glaucoma our chief duty is to acquaint the patient with the nature of his disease. He should be told that he has a chronic disease which cannot be cured, but can be controlled in the majority of cases although he will need to be under observation for the rest of his life.

A relatively small group of cases of chronic glaucoma which have a narrow anterior chamber angle, are best treated by surgery. But in the larger group of cases of chronic glaucoma, with a deep or open angle, the treatment is preferrably medical, and surgery should be resorted to only it the patient fails to do well on adequate medical treatment; that is, if the intraocular pressure remains high and the visual fields show progressive loss. Hence, if any patient is advised to have surgery when the disease is in an early stage and when adequate medical treatment has not been tried for a reasonable period, physicians are justified in recommending consultation.

CATARACT

The treatment of a cataract is surgical extraction. However the treatment of the patient with a cataract is an entirely different matter. A general physical examination should be made, looking for systemic toxic conditions, diabetes, anemia, dietary deficiencies, and focal infections, and measures should be taken to correct any of these conditions if present. A general tonic, adequate vitamins in the diet, and the use of vaso-dilators such as nicotinic acid in those cases with poor peripheral circulation, certainly do no harm and help to keep the patient in as good condition as possible until such time as surgery may be necessary.

It is also our duty to warn our patients as to the possibility of developing cataracts from exposure to radiation, particularly infra-red and x-ray, and from certain poisons or drugs, such as dinitrophenol or a common insecticide, paradichlorobenzine.

Even though it is impossible to prove that any form of local or general treatment has any effect in stopping the progress of an incipient senile cataract, or in clearing lens opacities which have been formed, we feel that the use of drops, such as dionin, is very valuable in the control of the patient, because they satisfy the patient's desire to DO something about the condition. Such treatment also permits a periodic examination of the eyes so that other conditions, especially glaucoma, can be detected early. Unless patients are given a specific program to follow, they will not report for periodic examinations.

The newly publicized treatment with fish lens extract is not only valueless, but actually dangerous, because the patient may become sensitized to the lens protein. If such sensitization occurs, and then operation becomes necessary, there is danger of an anaphylactic reaction.

The question often arises as to when a cataract should be removed. The answer is—whenever the patient is unable to do the things that he needs to do, or is unable to carry on his normal activities. This varies with the occupation. If it is necessary for him to meet certain visual requirements to keep his position, as with a railroad, it may be necessary to operate when the cataract is quite immature, especially if it is centrally located. The general public as well as some physicians, are not yet aware of the fact that it is no longer necessary to wait until the cataract becomes "ripe". The modern intracapsular method of extraction allows the cataract to be removed at any stage.

When cataracts are present in both eyes, it is better to remove the more advanced cataract while the patient still has useful vision in the other eye, so that he will not be hampered in getting about during the healing period. Then, as soon as the vision in the unoperated eye fails, the vision of the operated eye may be corrected with a lens and normal activities continued without interruption.

In cases where the cataract is entirely unilateral the question often arises as to whether operation is indicated or not. If it is dense enough to make the patient conscious of a "blind side" we feel that it should be operated, for removal of the cataract will increase the visual field and add greatly to the patient's safety. If a correcting lens is not worn over the operated eye, no diplopia will occur. If the cataract is allowed to become hypermature, complications, such as inflammation and glaucoma, may develop and thus lessen the chances for a good operative result. Furthermore, very few cataracts, except the traumatic variety, remain unilateral.

SENILE MACULAR DEGENERATION

Senile mascular degeneration causes a central loss of vision so that the patient is unable to read, but is able to get about because the peripheral portion of the retina is not involved. While it is a degeneration, these people should not be cast off with the remark that nothing can be done for their condition. It is hard enough when they have to give up reading, and an effort should be made to prevent their becoming discouraged or despondent. These people are very grateful for the reassurance that they will not go blind from this condition, but that since the periphery of the retina is not involved they will always be able to get about. Certainly the general supportive treatment and vaso-dilator therapy mentioned under the treatment of patients with cataract, applies here as well.

RETINAL DETACHMENT

Before 1930 a retinal detachment usually meant the loss of vision in the eye as we had no effective treatment for these cases. Since that time, however, surgical sealing-off or closure of the retinal holes responsible for the separation, by "spot-welding" or creating inflammatory adhesions between the retina and the underlying choroid, has saved the vision in a large number of these cases. This is accomplished by the use of surface and penetrating diathermy. The percentage of good results is becoming much higher with earlier diagnosis and with improvements in technique. If the operation is not done, the eye almost always eventually becomes blind. Although it is true that the earlier the treatment is instituted the better the result, it is advisable to put the patient in bed with both eyes bandaged for three or four days prior to the operation, so as to allow the retina to settle back into place as much as possible. The prognosis is especially favorable in early cases where there are only one or two holes, and, when the retina has settled back into its normal position before the operation.

In retinal detachments, the possibility of a tumor should always be kept in mind and all cases should be transilluminated. A dense shadow indicates a solid detachment due to neoplasm such as a malignant melanoma of the choroid.

SUDDEN LOSS OF VISION

One of the most terrifying experiences is sudden loss of vision, either complete or incomplete. The most common cause of the complete loss of vision in one eye is the occlusion of the central retinal artery. If seen very early, an attempt should be made to restore the circulation by dilating the retinal artery by inhalations of amylnitrite and by intravenous injections of sodium nitrite. A paracentesis of the anterior chamber may be done to produce a sudden reduction of intraocular pressure thus allowing the arterial blood pressure to force blood through a spastic artery, or to dislodge a small embolus.

In the cases with incomplete sudden loss of vision of an eye, several conditions must be considered: thrombosis of the central retinal vein, or it's branch; retinal detachment; intra-ocular hemorrhage; and, intracranial hemorrhage. Since the diagnosis of these conditions depends upon the ophthalmoscopic examination it should be done without delay, because early treatment is imperative in most of these conditions.

In cases of thrombosis of the central retinal vein, we feel that the use of heparin and Dicumerol, in an attempt to prevent further clotting, has proven beneficial in many instances. However, an obstruction of the central retinal vein, or of one of it's branches, in a person with marked arteriosclerosis is generally a bad prognostic sign—not only for the eye, but for the occurrence of similar vascular accidents elsewhere within the body.

An intraocular hemorrhage may be the patient's first intimation that he has hypertension, and always calls for a careful general examination and care. These people should always be warned against coughing, straining, stooping, and lifting, as the increased intrathoracic pressure is transmitted to the vessels of the head and thereby increases the possibility of a recurrence of hemorrhage.

WATERY EYES

Another group of eye conditions, which are a constant source of annoyance to the patient and to the doctor, are those in which the chief complaint is only excessive tearing.

In infants, tearing may be the chief symptom of a virus infection of the newborn, called inclusion blennorrhea. This appears about five to seven days after birth. It never causes as much swelling of the lids as gonococcal conjunctivitis, and the secretion is scanty instead of profuse and purulent. Positive diagnosis is made by finding inclusion bodies in the epithelial cells of conjunctival scrapings. It is a self limited disease.

The chief cause of tearing in infants, however, is that due to congenital occlusion of the nasolacrimal duct. The mucous membrane which closes the opening of the nasolacrimal duct into the inferior meatus of the nose, should open shortly after birth. If it does not, tearing starts when tears begin to form about the third week after birth. In these cases the mother should be advised to massage the region over the sac gently in an attempt to press the tears that have collected in the sac, into the nose. This procedure should be repeated about three times a day. If mucous or pus is present, massage should be repeated often enough to keep the sac empty, and should be followed by instillations of astringent drops such as zinc-sulfate, or by an antibiotic solution. The duct will open within two or three months in most cases. If it does not, the duct should be probed once. If it fails to stay open after one probing, repetition is useless and it will be necessary to make a direct opening from the tear sac into the nose.

In adults, watery eyes are often due to excessive mucous formation, and when the tears are measured they are found to be deficient or absent. The amount of tear formation is measured by the Schirmer test. In this test a piece of filter paper 5 mm. wide, bent at one end, is hooked into the conjunctival sac over the lower lid. In normal individuals at least 15 mm. of the remainder of the filter paper will be wet with tears in five minutes. Many women at about the time of the menopause, develop a deficiency of tears that is often associated with dryness of the mouth and arthritis. They complain of difficulty in opening the lids, irritaton of the eyes, which is increased in the wind or in hot rooms, and, after close work. In some cases the irritation is worse at night and may be severe enough to waken the patient. The eyes develop a chronic conjunctivitis with a tenacious secretion. In some cases punctate abrasions of the cornea develop and cause blurred vision, scratchy sensation, and even pain. These abrasions take a stain and can be seen with a loupe, or with the slit-lamp.

These patients are relieved by frequent instillation of artificial tears, such as Clifford's alkaline buffer solution, glycerine in Locke's solution, a bland oil, or by 1% methyl cellulose. In mild cases the use of a slightly irritating eye-drop may result in increased activity of the lacrimal glands, especially where the deficiency may have a psychic background. Stilbestrol has not been as helpful as we had hoped but has given some relief in a few cases. In very severe cases the tear points can be closed with diathermy coagulation, so that what tears do form remain in the conjunctival sac until they evaporate.

Excessive tearing may result from stimulation of the 5th nerve endings in any part of the face, especially the eye and the nasal mucosa, reflexly from painful stimuli elsewhere in the body, and from psychic stimulation. It may also result from occlusion of the lacrimal drainage system, or from simple eversion of the lower tearpoints so that capillary attraction is absent and the tears simply roll over onto the cheek. If the tearpoint can be seen without pulling down the lid margin it is everted.

If the tearpoint is open and in contact with the globe, and the duct can be irrigated through freely, the tearing is due to excessive formation. If the duct is occluded, probing may be attempted although it usually gives only temporary relief.

Since an occluded sac usually becomes infected and a potential source of infection for the eye, these patients should be advised to have a new opening made from the tear sac into the nose, providing the tearflow is adequate. If the tearflow is deficient, the sac should be removed.

CORNEAL TRANSPLANTS

The general physician is often asked by his patients about many conditions which are publicized in the lay-press. One of these is with regard to corneal transplants. The spectacular newspaper articles regarding corneal transplants have aroused great hopes in blind, or partially blind, people. Some have made long trips, only to have their hopes shattered when their eyes were found to be unsuitable for transplants. It is our duty to try to prevent these heartaches and disappointments if possible. As in so many conditions, the ones who need the help most are usually the ones which are not suitable cases. Those eyes in which there has been a previous severe deep inflammation usually give very disappointing results. Hence the number of people that can be helped by transplantation is very small, probably less than one per cent of the blind. After trying transplants in practically all types of corneal disease it has been found that the chief indications for corneal transplantation are limited to conical cornea and corneal scars involving only the central portion with some clear periphery, and in which the rest of the eye is healthy.

TELESCOPIC LENSES

Quite recently claims have been made that anyone with two per cent vision could be made to read with a new type telescopic lens. This of course is untrue.

Telescopic glasses, which are like miniature binoculars, do increase the size of the retinal image sufficiently so that some eyes with small central retinal lesions are able to read again. However, it must be pointed out that these are cumbersome and expensive, and that the magnification produced causes such a marked limitation in the field of vision that their range of application is rather small.

RETROLENTAL FIBROPLASIA

In recent years blindness from retrolental fibroplasia, has become a real problem. This condition, which was unknown before 1937, has increased in incidence until it is now the chief cause of blindness in infants. It occurs in about a third of the premature infants weighing less than three pounds at birth. The process starts at about the end of the first month with dilitation of the retinal vessels, followed by gray masses and hemorrhages in the retinal periphery, a generalized retinal edema, the formation of new vessels in the retina and vitreous detachment of the retina, and finally the formation of a fibrous membrane behind the lens. In some children the condition becomes arrested before it is complete, but usually it continues until the children are completely blind.

Treatments with various substances, including vitamin E, ACTH, and cortisone, have failed. The part played by oxygen concentration in incubators, once thought to be a factor, has not been borne out. The only hope appears to be in prevention.

Some recent work reported from the Chicago Lying-In Hospital by Hepner and Krause(1) seems to indicate that the higher electrolyte content in cow's milk used in the diet, and the resulting fluid retention, is a possible causitive factor. These authors also believe that there is a relationship between the large blood transfusions often given these prematures and the increased incidence of this disease.

If these findings are corroborated the feeding of mother's milk, or of an artificial preparation with similar low electrolyte content, may be a real step in preventing the condition.

RED EYES

A group of eye conditions which cause difficulty in diagnosis are the "red eyes". The chief conditions presenting non-painful red eyes are conjunctival hyperemia, subconjunctival hemorrhage, and conjunctivitis.

Hyperemia is distinguished from conjunctivitis by the absence of secretion. It results from excessive close work, irritation from wind, dust, fumes, and radiation, such as ultra-violet from welders' or disinfectant lights. Usually a mild eyewash such as a solution of zinc sulfate containing epinephrine is sufficient.

Subconjunctival hemorrhages are alarming to the patient. They may follow lifting, coughing, straining, or appear without apparent cause. An examination for hypertention and arteriosclerosis is indicated but the chief thing is to reassure the patient that the hemorrhage is not serious and will disappear in about ten days.

Conjunctivitis is characterized by hyperemia, edema, exudation, and infiltration. It may be bacterial, allergic, or traumatic. Symptoms of itching, burning, smarting, or foreign body sensation are typical of conjunctival involvement. As a rule when pain develops in red eyes it means that the inflammation is no longer superficial or conjunctival, but that there is involvement of the cornea or of one of the inner coats of the eye.

The chief conditions to be differentiated in painful red eyes are, acute iritis, and acute glaucoma. Diagnosis should be made as promptly as possible because the treatments are exactly opposite as far as dilatation of the pupil is concerned. Usually the eye with acute glaucoma is stoney hard and this condition can be diagnosed by palpation, whereas the eye in iritis is apt to be of normal tension or soft. Just to confuse the issue, however, there are cases in which an increased pressure is secondary to iritis, and, in these cases, the treatment of the iritis becomes primary.

USE AND ABUSE OF NEWER DRUGS

While the newer drugs are very helpful in ocular infections, their promiscuous use for any ocular complaint, in lieu of a diagnosis, is to be decried. Antibiotics, especially penicillin has replaced yellow oxide of mercury ointment as a "cure-all" for some druggists, nurses, and even doctors. Many times various antibiotics are tried one right after the other without any knowledge of the organism present — or in fact without knowing if the condition is bacterial, viral or allergic in nature. This "shot-gun" type of therapy should be stopped as, in many cases, it only sensitizes a patient's eyes to those antibiotics so they they cannot be used later when they are needed, sometimes desperately.

The routine use of penicillin "shots" for any general condition, often demanded by the patient it is true, has so sensitized the general public that we have practically had to abandon its use to prevent severe local reactions which follow its instillation into the eye in a sensitized person. I have seen marked blepharitis, conjunctivitis, and keratitis in these cases. In fact we have had to use only the newest antibiotics for the eye in order to keep ahead of the sensitization resulting from their general use. Let's use the old, tried remedies, such as zinc, zephiran, and metaphen, for the cases of simple conjunctivitis and save the antibiotics for the times when they may be really needed.

The new chemotherapeutic agents, when carefully used, have proven to be very valuable in ophthalmology. The selection of the proper drug depends on the bacterial diagnosis.

If gram-positive organisms, or gram-negative cocci are found, the drugs of choice are: the sulfonamides, such as sulfacetamide or Gantrisin; antibiotics, such as bacitracin, Polymyxin-B, and Terramycin, excepting in gonococcal infections for which penicillin is the drug of choice. If gram-negative rods are found, streptomycin, neomycin, aureomycin and chloromycetin are indicated.

CORTISONE

Cortisone locally can be useful in any ocular condition in which congestion is a factor, such as congestive glaucoma and iritis, but it should be remembered that it only relieves the congestion and does not cure the disease. In corneal lesions it may cause distinct damage, especially in herpetic lesions, and in some corneal ulcers. We have seen cases in which we feel that the useful vision of an eye was lost through the use of cortisone. A safe rule is not to use cortisone, either alone or in connection with an antibiotic, in cases of corneal involvement.

LOCAL ANESTHETICS

The promiscuous use of local anesthetics such as Pontocain and Butyn in the eye, after removal of corneal foreign bodies, or for the treatment of chemical burns, corneal abrasions, and ulcers, is not without hazard.

It has been proven that all of the anesthetic agents commonly used in the eyes delay or retard the healing of the corneal epithelium(2) (3). The wool fat and white petrolatum used as bases for ophthalmic ointments also cause a similar inhibition(4). Furthermore, since ophthalmic anesthetic ointments are frequently sold to patients without medical authorization, all physicians should be conscious of the possible misuse of these preparations. Although we physicians cannot control their indiscriminate use by others, we are in a position to inform our patients of the dangers of the promiscuous use of self-prescribed eye anesthetics.

CONCLUSIONS

It is time for all physicians to resolve:

1. That we will institute immediate remedial measures for every child that develops a squint, and that, if medical treatment is not effective, we will advise surgical correction before the age of memory.

2. That we will think first of chronic glaucoma in all cases of slow, progressive, non-painful loss of vision in adults.

3. That we will not delay in arriving at the exact diagnosis and instituting proper treatment in the cases of sudden loss of vision.

4. That we will try to protect our patients from exploitation by unscrupulous individuals whose unsupported claims for the restoration of sight appears only in the laypress. And, lastly,

5. That we will not become careless in the use of new therapeutic drugs, and thereby prevent the quickest and best possible healing, or even endanger the vision of our patients.

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A matching plan designed to eliminate some of the problems of selecting candidates for admission to medical schools has been proposed by Dr. John A. D. Cooper and Dr. Harold A. Davenport, writing in the October issue of The Journal of Medical Education. Dr. Cooper is assistant dean and chairman of the committee on admissions at Northwestern University Medical School, Chicago, Illinois.

The matching plan is designed to enable both student applicants and medical schools to form mutually satisfactory connections without some of the anxieties and pressures which result currently. Some of the problems are a result of the fact that approximately three times as many students apply as can be admitted to medical schools.

The projected system is modeled after the highly successful intern-hospital matching plan which has operated for the past three years.

Under the suggested plan, students would remain free to apply for admission to the school or schools of their choice, and the medical schools would be allowed free indication of preference. All choices, to be filed at the central office of the Association of American Medical Colleges, would be confidential.

As projected, a deadline for applications to all medical schools would be set, possibly for March 1. Sometimes within the next two months each medical school would send to the central office a list of applicants arranged in order of preference, rejecting any they felt were unqualified for admission by their standards. Students would send the office a list of all medical schools to which they applied in order of preference. A card for each applicant would then be made by the central office and the matching would be done with complete objectivity, according to the information recorded on the IBM punch cards.

The plan favors the applicant in securing admission to the school of first choice and allows each school to secure the students ranked highest and available to it.

The authors point out that the plan has numerous advantages, not the least being uniform deadline dates for applications. At the present time each school sets its own dates. This creates much uncertainty, sometimes resulting in a student accepting a place in a school with an early deadline, only to withdraw when a later preferred school selects him as a candidate.

President's Page

AMERICAN MEDICAL EDUCATION FOUNDATION

Notice to All Members:

Dr. Louis D. McGuire has consented to assist your President in the annual drive for funds for the American Medical Education during the months of November and December. Any donation which you care to make may be earmarked for your school, and it should be sent to the American Medical Association through Dr. McGuire. This money, plus an additional amount, is then sent to the school of your designation.

This collection is taken up at this time of the year so that one will have a better idea as to how much he can give after he has a good idea what his income tax will be.

Some trips will be made into the state but not on the extensive scale that occurred last year, when Nebraska had the highest per capita donation of any state in the union, and was third in the gross amount donated.

Times are a little harder this year and we do not expect to do so well, but some pledges were made last year and many others will wish to give the same amount as they gave last year. It will be necessary to give during November or December if you are to get credit against your income tax.

Notice of this drive and announcement concerning this drive should be made at every regional or county medical society.

Sincerely yours,

JAMES F. KELLY, M.D.,
President,
Nebraska State Medical Assn.

THE NEBRASKA STATE MEDICAL JOURNAL

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THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

JUSTICE DEPARTMENT TO HANDLE NON-SERVICE CONNECTED INVESTIGATIONS—

Under a new plan about to be put into effect by Veterans Administration, the Department of Justice will be called in to handle cases of suspected fraud concerning the "inability to pay" declaration of veterans with non-service connected disabilities. VA itself is forbidden by law to look behind the veteran's statement that he can't afford private treatment. According to testimony introduced in Congressional hearings, this has resulted in many abuses.

The new arrangement provides that if a VA hospital manager has good grounds to suspect that the veteran's claim of indigency is fraudulent, he will confer with federal law-enforcement officials. An investigation will then be conducted by Justice Department, the regular law-enforcement arm of the federal government. If the facts justify prosecution, the case will be taken to federal court. There the government will have to prove that the veteran in question set out "premeditatedly, purposefully and intentionally" to defraud the government.

Also nearing the announcement stage is a tightening up of the questionnaire filled out by veterans with non-service connected conditions when they apply for VA hospitalization. VA medical and legal officials have been working on the new wording since last spring.

It is expected the revised form will call on the veteran to supply more information about his finances. The new questions are being given a final check by VA attorneys before presentation to the Administrator.

CHICAGO PAPER SUPPORTS AMA POSITION—

The Chicago Tribune, one of the most powerful newspapers in the country, recently upheld, editorially, the American Medical Association's position on veterans' medical care.

Dr. Edward J. McCormick, president of the American Medical Association, is on firm ground in calling for reexamination of the extent of free medical care to be dispensed by the veterans administration, the Tribune said.

No one denies the right of a man incapacitated in his country's service to receive all medical attention which can benefit him, but the VA, thanks to a Congress most sensitive to pressures of the veterans' lobby, does not confine itself to that. "A racket has sprung up in the provision for extending medical care to nonservice connected disabilities when VA facilities are available to handle such cases. A year ago 65 per cent of the patients in VA hospitals fell into this category. During the year Sept. 1, 1951, to Aug. 31, 1952, 85 per cent of the 500,000 veterans treated were patients with nonservice connected disabilities.

"Dr. McCormick reports that there are now 20 million veterans in civilian life and the number is increasing by a million annually. If a vast and proliferating VA empire is to keep pace with this enormous demand, it is hard to see how the process can be brought to a stop short of a completely nationalized medical profession and system of hospitals. The expense of any such operation would be staggering, and the loss of liberty apparent."

"It is time to call a halt to this progression and to impress upon Americans that while they may be veterans they are citizens first, that their responsibility is to take care of their own requirements instead of trying to shunt them off on their fellow citizens and that in the long run there can be no benefit even if they seem to be ahead of the game in getting something from the government. The government is themselves, and they pay for it. The pay will increase in proportion if these exactions continue, precisely as we approach the point where this becomes a nation of veterans."

THE ST. LOUIS CLINICAL SESSION—

Arrangements are being completed for the seventh annual Clinical Session of the American Medical Association Dec. 1-4, in St. Louis. This year's program has been designed to give the general practitioner an opportunity to see and hear the latest developments in medicine. Such topics as chest injuries, compression fractures of the vertebra, chronic pancreatitis, weed poisoning, and chronic arthritis, drugs and vaccine therapy, will be presented. Special features include fracture demonstrations; problems of delivery, with manikin demonstrations by leading obstetricians; traffic accidents, an exhibit symposium combining the experiences of physicians, the National Safety Council, and police departments; and diabetes, including exhibits and question and answer conferences in an adjoining room.

The Jefferson Hotel has been selected as the headquarters for the House of Delegates sessions and reference committee meetings. All other features, the Scientific Exhibit, lectures, motion pictures, color television, and the Technical Exhibit, will be presented at the Kiel Auditorium. There will be more than 80 exhibits in the Scientific Exhibit: The Technical Exhibit will feature about 150 displays covering all types of office and medical practice needs. Plan now to attend this meeting.

News and Views

FROM THE NORFOLK DAILY NEWS—

After deliberating 13 hours, a jury here found Dr. George B. Salter, local physician, who had been charged with malpractice, not guilty. The suit was brought by Harry Sikes, formerly of Gregory, S.D., now of Denver who charged that Dr. Salter failed to diagnose and treat a fracture of the left leg which he hurt in a motorcycle crash in 1950. The leg eventually was amputated.

FROM THE SCOTTSBLUFF STAR-HERALD—

Mrs. Florence Rena Sabin, one of America's foremost women scientists, died October 3rd at her home following a heart attack. She was 82.

She served for 23 years as assistant in anatomy at Johns Hopkins Medical School and in 1925 became the first woman appointed to the staff of the Rockfeller Institute of Medical Research in New York.

SPALDING DOCTOR OBSERVES 50 YEARS OF ACTIVE PRACTICE—

Whenever any one talks of Spalding the name of Dr. M. M. Sullivan is certain to pop up before the conversation has gained much headway. The reasons for this are numerous. Dr. Sullivan has played a major role in Spalding's civic life for the last 50 years. He has also brought into the world the greatest portion of Spalding's present population.

This year he is observing his 50 years as a practicing doctor and surgeon.

He has watched Spalding grow much the same as he has seen the horse and buggy disappear and be replaced by the early automobile. He then watched the early auto, which was good only for summer use, fade into the ground as the newer and faster automobiles took over and good roads replaced the old wagon trails which were numerous in the sandhills back in the early 1900's.

Dr. Sullivan says there has always been a doctor in Spalding. For years he practiced alone but in 1918 he took in his first partner. He has had a partner ever since. Dr. R. J. Fox is working with him today. He is the only local man that Dr. Sullivan has had working with him.

In addition to his medical duties, Dr. Sullivan has played a major role in Spalding civic life. He has held almost every position in the city. He has served on the council, school board, and has headed drive after drive for funds. In 1918 and 1919 he served on the constitutional convention. For ten years he was a member of the game commission. He has been president of the Creighton Alumni Association. Dr. Sullivan graduated from Creighton in 1899 with his A.B. degree. He received his master's degree from Creighton in 1901 and then finished his medical course and received his M.D. degree in 1903.

Dr. Sullivan was a confirmed bachelor until 12 years ago when he married an O'Connor school teacher, Florence Cavanaugh. He is now recuperating from a heart attack with which he was stricken two years ago while returning home from Europe. Dr. Sullivan plans to resume his practice in the near future on a modified scale, and looks forward to many more years of practice.

Dr. C. M. Foote of Hastings, was elected president of the Mary Lanning Hospital medical staff at the annual meeting September 21. Dr. Clyde Kleager was elected vice president and Gerald Aldridge, hospital administrator, was reelected secretary.

FROM THE OGALLALA NEWS—

"Amputations" was the subject discussed by guest speaker Dr. Samuel A. Swenson, Omaha, when he addressed the Keith-Garden-Perkins Counties Medical Society here last week. Attending were Dr. and Mrs. Roland Thompson and Dr. and Mrs. F. M. Bell of Grant; Drs. Willard Seng and A. Burrell Albee of Oshkosh and Dr. and Mrs. E. A. Harvey, Dr. and Mrs. S. M. Weyer, Dr. and Mrs. J. L. McFee, Dr. and Mrs. R. E. Benner and Dr. Donald Eberle, Ogallala. Dr. McFee, society president, presided.

Dr. E. L. Brush, Norfolk, was elected president of the Our Lady of Lourdes Hospital staff at its annual dinner on September 22. Others elected were Dr. F. A. Bulawa, vice president; Dr. Earl C. Slaughter, secretary-treasurer; Dr. F. A. Pollack, Dr. A. J. Schwedhelm and Dr. Val Verges, executive council members.

FROM THE LINCOLN STAR—

Nebraska's new State Health Board was named recently by Gov. Robert Crosby. All members are from Lincoln, this being necessary until the constitution is changed permitting members of such boards to live outside of the capital city.

The medical members of the new board are Dr. J. E. M. Thompson, who is nationally known in the field and is former president of the State Medical Association, and Dr. Maurice D. Frazer, member of the University of Nebraska College of Medicine faculty who lives in Lincoln.

The engineering member is Morris I. Evinger, of the University faculty, and the representative of the dentists is Dr. D. T. Waggener, who is on the University of Nebraska Dental College faculty.

Representing the veterinarians is Dr. C. J. Norden, Jr., associated with the Norden Laboratories here.

Public members are Dr. Joseph B. Burt, dean of the University College of Pharmacy, and Mrs. F. W. Putney, president of the Lincoln-Lancaster County Advisory Health Committee.

The board will select the director of the State Department of Health. Dr. E. A. Rogers is at present acting state director of health and has said he would be willing to accept the post under the new board.

Governor Crosby designated Dr. Thompson, Mrs. Putney and Dr. Burt for three-year appointments; Dr. Waggener and Dr. Frazer for two-year terms; and Professor Evinger and Dr. Norden for the one-year appointment. After the expiration of the intial appointments, all terms will be for three years.

FROM THE FALLS CITY JOURNAL

The other day, The Journal recalled that September 16th was the anniversary of the opening of the Cherokee strip for settlement and that a number of Falls Cityans, some living and some deceased, made the historic run to claim land in what now is part of Oklahoma. One of the Falls Cityans who made that famous run was Dr. G. W. Reneker, retired physician, now 89 years old. Dr. Reneker went into the strip on a train moving up from Kingfisher, Oklahoma, on the south. He dropped off at Enid and staked a claim to a business site. The next year, in 1894 he and Mrs. Reneker were married and settled in Enid. But, Mrs. Reneker recalled, it was too wild and wooly a town for her. The Renekers lived there three years and witnessed many acts of lawlessness, shooting and inter-town fueds. Because of Mrs. Reneker's dislike for the rootin', tootin', shootin' atmosphere, the Renekers moved out.

FROM THE GRAND ISLAND INDEPENDENT—

Dr. Ray G. Witham, who practices in Craig, Colorado, and makes many trips by air, was returning from an emergency trip when he and his pilot spotted an accident on the highway below. The plane was landed in a nearby alfalfa field and Dr. Witham gave emergency treatment to four injured persons, and is credited with saving the life of one.

FROM THE OMAHA WORLD-HERALD—

A new page in the early history of science and medicine was revealed recently in the translation of a four-thousand-year-old clay tablet at the University of Pennsylvania. The world's oldest known medical handbook, translated by Dr. Sammuel Noah Kramer and Dr. Martin Leven, list prescriptions for sale, filtrates and internal remedies used by an anonymous Umserian physician about 2100 B.C. The tablet was unearthed by University of Pennsylvania researchers 50 years ago at Nippur, Iraq. The deciphering, originally begun 13 years ago, only was recently completed.

Dr. Kramer said the ancient physician's favorite remedies included salt, saltpeter, milk, snake skin, turtle shell, cassia, myrtle, alkali and thyme.

LINCOLN—

Dr. E. A. Rogers, acting director of the state health department, will be continued in that capacity until the newly-appointed state board of health has had opportunity to familiarize itself with the duties and problems of the department, it was decided at an organizational meeting October 5.

Dr. J. E. M. Thomson was selected chairman of the board, subject to his acceptance on his return to the city. Dean Joseph B. Burt of the College of Pharmacy at the University of Nebraska was named vice chairman.

The board set up a committee to consider qualifications for a permanent director, and determine a deadline for receiving applications.

Under a constitutional limitation on residence of state executive officers and board members, all health board members are from Lincoln. A proposal to remove the limitation will be voted on at the 1954 election.

TWO MILLION DEPENDENTS OF SERVICE MEN TO GET CARE—

The Department of Defense is moving ahead in planning expansion and more equitable availability of government-paid medical care for dependents of soldiers and sailors. With the goal of the Pentagon to reduce medical-officer-ratio to 3 per thousand troop strength, it has been suggested that it may be necessary to let voluntary, non-profit plans take over part or all of this job .

NEW STATE HEALTH BOARD APPOINTED AND ORGANIZED—

The following members have been appointed to the new State Board of Health: Morris Evinger, civil engineer; D. T. Waggener, D.D.S.; Maurice Frazer, M.D.; Mrs. Fred Putney; Dean Joseph Burt, College of Pharmacy, U. of N.; Carl Norden, D.V.M.; and J. E. M. Thomson, M.D. An organizational meeting has been held, at which Doctor Thomson was elected chairman, and Dean Burt, vice chairman .

FURTHER PROGRESS REPORTED ON POLIO VACCINE—

An interval report to the American Academy of Pediatrics by Dr. Jonas E. Salk, research professor of bacteriology at the University of Pittsburgh School of Medicine, revealed that the vaccine has now been administered to a total of 637 subjects. Antibody studies before and after the administration of the vaccine show marked increase in titer of antibodies for the various strains. The study is not completed.

NEW ADRENAL-CORTICAL HORMONE ISOLATED—

A news release from the Eighth International Congress of Rheumatic Diseases states that Swiss and British chemists have isolated an adrenal-cortical hormone differing radically from cortisone. It is termed a "mineralo-corticoid."

LISTEN—

Doctors and their patients will be interested in listening to, and watching, the Fall Television Series of The March of Medicine, Nov. 8 and Dec. 3. These are presented by Smith, Kline and French Laboratories and the American Medical Association. In Nebraska these will be viewed over WOW-TV at 9:00 p.m. CST.

THE AMERICAN JOURNAL OF SURGERY HONORED—

The American Journal of Surgery has been honored as the recipient of the first Honor Award for Distinguished Service in Medical Journalism to be given by the American Medical Writers' Association. This award, consisting of a plaque, is presented annually for "accuracy, clarity, conciseness and newness of information in articles, editorials and other material; for excellence of design, printing and illustrations, and for distinguished service to the medical profession, rendered by a United States or Canadian medical periodical."

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Wisner, Nebraska
Barnes, Edwin Heman, III
2622 N. 56 Street
Omaha, Nebraska
Behrns, Robert Sullivan
1480 Spencer
Omaha, Nebraska
Bendorf, Donald Harry
Schuyler, Nebraska
Bilon, Thomas E.
2123 W. Koenig St.
Grand Island, Nebraska
Breon, George Alfred, IV
1116 No. 49th Ave.
Omaha, Nebraska
Bunting, Richard Arndt
3914 Castalar
Omaha, Nebraska
Butler, Robert Enos
409 N. Garher
Minden, Nebraska
Capek, Richard Burton
2222 Sheridan Blvd.
Lincoln, Nebraska
Carter, Russell Philip
208 East Nebraska St.
Blair, Nebraska
Coffey, James Heath
506 W. Lincoln Street
Blair, Nebraska
Davis, David Winningham
121 South 51st Avenue
Omaha, Nebraska
Dean, Gordon Edward
5410 So. 28th Avenue
Omaha, Nebraska
Dominy, Dale Edwin
808 North Baltimore
Hastings, Nebraska
Doyle, Herman Eugene
c/o St. Anthony Hospital
Denver, Colorado
Eisenbach, John Raymond
Culbertson, Nebraska
Finegan, John Charles
Friend, Nebraska
Fitzpatrick, John E., Jr.
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Omaha, Nebraska
Fobes, Clark David
2320 Avenue G
Council Bluffs, Iowa
Fredericksen, Roy Edward
2319 So. 11th St.
Omaha, Nebraska
Gelwick, Richard Gruver
2418 Crook Street
Falls City, Nebraska
Hague, Francis Howard
1409 Koenigstein Ave.
Norfolk, Nebraska
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Palmyra, Nebraska
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Isacson, Edwin Peter
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Seattle, Washington
Moell, L. Dwight
4405 Marcy
Omaha, Nebraska
Morrison, James William
120 W. 2nd
Wayne, Nebraska
Moschel, Daniel Millard
1800 W. 5th Street
Hastings, Nebraska
Murray, Thomas Bernard
1023 West First Street
Grand Island, Nebraska
Nearenberg, Sidney
619 No. 33rd St.
Omaha, Nebraska
Nelson, Parry Swan
Stickney, So. Dak.
Nelson, Richard Curtis
1940 Virginia Lane
Billings, Montana
Niehaus, Karl Friedrich
411 So. 40th St.
Omaha, Nebraska
Niehaus, William Charles
Superior, Nebraska
Osborne, George Loer, Jr.
Box 293
Hemingford, Nebraska
Pattee, James J.
5431 So. 29th Ave.
Omaha, Nebraska
Paustian, Frederick F.
1805 N. 60th Street
Omaha, Nebraska
Pitsch, Richard Martin
626 Washington
Lincoln, Nebraska
Rice, Donald Edward
2103 No. 16th St.
Omaha, Nebraska
Rice, Jerrold Sidney
2010 5th Avenue
Kearney, Nebraska
Robinson, Benjamin
726 N. 57th Avenue
Omaha, Nebraska
Royal, Pauline Doris
2155 S. 52nd
Lincoln, Nebraska
Russum, William John
2524 No. 55th St.
Omaha, Nebraska
Ryder, Gilbert Ernest
1901 Spencer St.
Omaha, Nebraska
Sand, Bernard F.
1312 Sixth Corso
Nebraska City, Nebraska
Sato, Kenneth Kazuwo
Route 1
Mitchell, Nebraska
Sautter, Richard D.
Scotia, Nebraska
Schaumberg, Edward G., Jr.
4242 Farnam
Omaha, Nebraska
Sorensen, Robert Marenue
1117 North H Street
Fremont, Nebraska
Steenburg, Houtz Gillilan
1107 8th Street
Aurora, Nebraska
Steinhour, Jerold Frank
Henry Ford Hospital
Detroit, Michigan
Steinkruger, Verlyn W.
Franklin, Nebraska
Taylor, Donald Eugene
244 So. Cotner Blvd.
Lincoln, Nebraska
Thomas, Conrad James
Linwood, Nebraska
Tollefson, Richard Lee
210 Omaha Ave.
Norfolk, Nebraska
Treptow, Kenneth Ray
3910 Apple St.
Lincoln, Nebraska
Urwiller, Kenneth Lewis
St. Michael, Nebraska
VaVerka, John Richard
4120 Izard St.
Omaha, Nebraska
von Bergen, Sherill L.
1213 No. 64th
Lincoln, Nebraska
Yost, Howard Fulton
1809 So. 33rd St.
Omaha, Nebraska

A CONVENTION

A gathering where you look at many people and see no one; you keep your teeth exposed in what is meant to be a smile, and wear yourself to a frazzle greeting people whose names you can't remember; you attend luncheons and dinners costing high prices, and eating food that you would reject, at home, as unfit for human consumption; you go to cocktail parties armed with every conceivable plan to keep you from being stuck with any strange individual—but you always get stuck. (Contributed by a doctor's wife.)

An acre of sugar cane will yield about 2½ tons of refined sugar.

Announcements

SERVICES FOR CRIPPLED CHILDREN PROGRAM EXPANDED—

The program of Services for Crippled Children has been expanded to include children with Rheumatic Fever and Congenital Heart disease. Children with these conditions will be eligible for examination at the Extension Clinics and for such treatment as may be found necessary.

Referral will be made in the same manner as for other crippled children. Further information may be obtained from the County Department of Public Welfare or from the Office of Services for Crippled Children, State House, Lincoln.

E. W. HANCOCK, M.D., Chief,
Office of Services for
Crippled Children.

AAGP PLANS ANNUAL ASSEMBLY IN CLEVELAND—

The American Academy of General Practice has announced plans for its sixth annual scientific assembly which will be held March 22-25, 1954, in Public Auditorium, Cleveland. A few of the headliners are to be Sir Alexander Fleming, Dr. Howard Rusk and Dr. E. J. McCormick.

JOINT MEETING, IOWA AND NEBRASKA HEART ASSOCIATIONS—

A joint meeting of the Heart Associations of Iowa and Nebraska will be held at the Blackstone Hotel in Omaha, November 7th, beginning at 9:00 a.m. Arteriosclerosis, hypertension, congestive heart failure, rheumatic fever, fluid and electrolyte balance and other subjects will be discussed. Essayists will include such highlights as T. Duckett Jones, E. Cowles Andrus, Walter M. Kirkendall, and Lewis E. January. You are invited to attend.

IMPORTANT NEW BOOKS COMING SOON—

The first two volumes of Abstracts on Military and Aviation Ophthalmology and Visual Sciences will come off the press on November 1. These two are devoted to cumulated, classified abstracts and annotated references to periodical literature and books dealing with every phase of this subject from 1900 to 1945.

CONTINENTAL CASUALTY COMPANY SERVICE MARK TO BLUE SHIELD—

To help eliminate public confusion regarding the Blue Shield name and symbol, the Continental Casualty Company has assigned to Blue Shield Medical Care Programs its entire right, title and interest in the service mark, BLUE SEAL. Physicians should be deeply indebted to Continental Casualty for its cooperative spirit as shown in this instance.

NATIONAL BOARD OF MEDICAL EXAMINERS CERTIFICATE NOT ACCEPTABLE—

The Nebraska Board of Examiners in Medicine and Surgery in regular session passed a resolution on September 20, 1953 stating that the certificate of the National Board of Medical Examiners would no longer be recognized as an endorsement for licensure in this state. This action is to be effective immediately.

Coming Medical Events

CRIPPLED CHILDREN'S CLINICS—

November 7—Alliance, St. Joseph's Hospital
November 21—Ogallala, Elks Club
December 5—McCook, St. Catherine's Hospital
December 12—Grand Island, St. Francis Hospital

NEBRASKA HEART ASSOCIATION - IOWA HEART ASSOCIATION FALL CLINICAL CONFERENCE — Blackstone Hotel, Omaha, Nebraska, November 7, 1953.

NEBRASKA HOSPITAL ASSOCIATION—November 12 and 13, Hotel Cornhusker, Lincoln, Nebr.

THE COLORADO STATE MEDICAL SOCIETY-REGIONAL RURAL HEALTH CONFERENCE—Shirley-Savoy Hotel, Denver, Colorado, November 11-12, 1953.

NEBRASKA CHAPTER OF THE AMERICAN COLLEGE OF SURGEONS—November 19, V.A. Hospital, Grand Island, Nebraska. This meeting has been changed due to the inability to secure the High School Auditorium for November 12. Afternoon meeting will be at the V.A. Hospital, Room S-205. Evening meeting at the High School Auditorium at 7:30 p.m.

NUMBER OF INTERNS AND RESIDENTS IN HOSPITAL TRAINING DOUBLED

Twice as many interns and resident physicians today are completing their training and furthering their education through hospital work as there were prior to World War II. During the year 1952-53, there were 7,645 interns and 16,867 resident physicians on duty in the nation's hospitals, compared to a total of approximately 12,000 in 1940.

News from Our Medical Schools

Dr. A. Ross McIntyre (second from left), Chairman of the Department of Physiology at the University of Nebraska College of Medicine, receives a $5,000 check from Louis F. Long, President of the Cudahy Packing Company, as a research grant for specialized studies in the field of endocrinology. Looking on are Edward A. Cudahy (left), Chairman of the Board of Cudahy, and Dr. James Perry Tollman, Dean of the College of Medicine.

Nebraska State Department of Health

THIRD ANNUAL CONVENTION NEBRASKA PUBLIC HEALTH ASSOCIATION—

The Nebraska Public Health Association convenes for its Third Annual Convention, November 19-20, Lincoln Hotel, Lincoln.

The program has been planned so that the general public interested in public health problems in their communities will have an opportunity to learn what they can do to help solve some of these health problems.

Wednesday evening, the night before the convention opens, the State Department of Health and the Lincoln-Lancaster Department of Health will have Open House, from 6:00 to 10:00, for all guests attending the convention.

Thursday morning, November 19, following the president's address, Dr. James P. Tollman, Dean of the University of Nebraska, College of Medicine, speaks on "Public Health Needs of Nebraska."

The program presentations following this keynote address will be in the form of panel discussions by specialists in certain public health fields, with opportunities for the audience to participate in the discussions.

These panels are on: "Rural Water Supplies," "Chemistry and the Public Health," "Garbage Disposal," "School and Community Health Education," "Surface Waters and Pollution," "Pure Food and Public Eating Places."

A smorgasbord, followed by square dancing, is the attraction for Thursday evening.

We hope medical groups in the state will send representatives to this convention, and will join with us in the discussions.

Among those taking part in the panel discussions will be: Paul M. Bancroft, M.D.; M. L. Mumgaard, Extension Engineer, University of Nebraska; Victor Levine, M.D., Creighton University; John Schenken, M.D., Pathologist, Methodist Hospital, Omaha; E. P. Anderson, D.V.S.; Kirk Sandall, U. S. Soil Conservation Service; M. F. Gunderson, Bacteriologist, University of Nebraska, College of Medicine; F. D. Fitzgerald, M.D., Creighton University; Cecilia Conrath, Health Education Consultant, District Office, Public Health Service.

The Woman's Auxiliary

On September 24, 1953, the Executive Board of the Woman's Auxiliary to the Nebraska State Medical Association had their regular fall meeting at the Cornhusker Hotel in Lincoln. The following recommendations were made:

1. Recommendations to ask the Resolutions Chairman to advise Dr. James Kelly that the board pledges its assistance to the United Health Fund Drive and the Cancer Society's Lay Education Program.

2. Recommendation that the Sinking Fund be maintained in its true purpose; that is, holding in reserve an amount of money equal to the budgeted finances for a fiscal year.

3. Recommendation to ask the Resolution Chairman to prepare an amendment to the By-Laws recognizing the status of Councilors.

Respectfully submitted,
MRS. HERBERT F. STAUBITZ,
Resolutions Chairman.

Wives of physicians from Eastern Nebraska and Western Iowa were entertained at a special program Tuesday, September 2nd, when the Iowa-Nebraska Medical Assembly met at the Hotel Chieftain in Council Bluffs. Members of the Pottawattamie County Medical Society Auxiliary arranged the program which followed a 6:30 p.m. dinner for assembly members and their wives.

Mrs. James P. Donelan, president, and Mrs. Isaiah Lukens IV, president-elect, will be in attendance at the 10th Annual Conference of State Presidents, Presidents-Elect and National Chairmen at Hotel LaSalle, Chicago, Illinois, November 18-20. Mrs. Donelan will participate in a panel discussion on "Organization."

Mrs. Lynn Sharrar, First Vice President and auxiliary representative attended a meeting of the Council of Women's State Organizations in Lincoln, October 13th, at the Y.M.C.A.

Doctors' Wives' Club of Omaha opened its club year October 5th at the home of the president, Mrs. Glenn D. Whitcomb. A 2 p.m. business meeting preceded the tea. Officers and committee chairmen who served as hostesses were, Mmes. Charles W. McLaughlin, Jr., vice president; Gerald C. O'Neill, secretary; John M. Thomas, treasurer, and Donald Bucholz, activities chairman. Others were Mmes. Adolph Sachs, publicity; J. A. Borghoff, courtesy; John F. Nilsson, parliamentarian; George W. Pritchard, and Maurice E. Grier, both past presidents. The club, founded in 1913, will hold seven meetings this year.

On Monday, September 21st, the Burt County doctors and their wives entertained the other units of the Tri County Medical Association and Auxiliary, at the Oakland Country Club. The men played golf in the afternoon and the women enjoyed bridge. Later, other members joined the group for a social hour and dinner. After dinner, the Auxiliary had a short informal meeting to make plans for participation in collecting donated articles for the Bazaar for the Children's Memorial Hospital in Omaha. Mrs. Isaiah Lukens IV, of Tekamah, Auxiliary President, announced the names of the various committee chairmen for the ensuing year.

The first meeting of the fall for the Lancaster County Medical Auxiliary was held Monday, October 5, at Bryan Memorial Hospital nurses' home. Mrs. John T. McGreer, Jr., president, presided at the business meeting.

MRS. DONALD F. PURVIS,
Publicity Chairman.

Know Your Blue Shield Plan

Orders for the Blue Cross-Blue Shield double postcards, offered to doctors for enclosure with their October and November statements, totaled 15,800. Physicians ordered the cards in quantities ranging from 12 to 1,000, but the average number of cards requested was 250.

She'd Kill the Goose That Lays the Golden Egg!

BLUE CROSS cannot cover admissions primarily for diagnosis

"Why can't you call it some rare disease until you find out what's wrong with me?'

If you do not receive Blue Shield payments promptly, ask yourself or your secretary, "Was the medical report fully completed and mailed promptly?" Though only 10% of the reports filed require correspondence, these delay payment and incur extra administrative expense. Everyone benefits if reports are fully completed when submitted.

The names of twenty-four Nebraska physicians have been added to the list of Blue Shield Participating Physicians since June 1. As of October 1, a total of 1,045 doctors had signed the Participating Physician's Agreement, agreeing to accept the Blue Shield allowance as full payment for services rendered to Blue Shield members whose annual incomes do not exceed $3,200 (family) and $2,400 (single).

NINE MONTHS' REPORT
NEBRASKA BLUE CROSS-BLUE SHIELD PLANS

	Blue Cross	Blue Shield
Membership, Oct. 1, 1953	223,451	195,659
Cases, Jan. 1-Oct. 1, 1953	30,853	51,356
Payments, Jan. 1-Oct. 1, 1953	$2,085,620	$1,500,547
Average cost per case	67.60	29.22
Percent of Income Paid for Cases	81.98	85.12
Percent of Income for Operating Expense	6.25	8.52
Percent of Income for Reserves	11.77	6.36

Doctors can safeguard the financial stability of Blue Cross-Blue Shield by refusing to order any unnecessary utilization of benefits. Just one extra day of hospitalization per Blue Shield patient would cost Nebraska Blue Cross $42,000 per month—$500,000 per year! Undue usage of benefits could break Blue Shield, too.

Deaths

M. C. James, M.D., Columbus. Doctor James died at his home in Columbus on September 11 at the age of 70 years. He had practiced his profession as a surgeon in Columbus for more than thirty years. Prior to his coming to Columbus he had graduated from Jefferson Medical College, served an internship, then a residency in surgery at the Pennsylvania Hospital in Philadelphia. He had also served in the American Ambulance at Neuilly-sur-Seine and, later, in the Medical Corps of the U.S. Army, with the Jefferson Medical College unit at Nantes, France. He is survived by his wife, Elizabeth; son, Stephen S.; two brothers, and four grandchildren.

Claude Powell Fordyce, M.D., St. Joseph, Mo. Doctor Fordyce died on Aug. 18, in the Missouri Methodist Hospital in St. Joseph. He was seventy years old. He received his degree in medicine from the Washington University, St. Louis, in 1910, and practiced medicine for many years in Falls City. Afterward he became assistant editor of the Journal of the A.M.A. He finally specialized in eye, ear, nose and throat diseases after a period of postgraduate work in the East. At the time of his death he had practiced his specialty in St. Joseph for the past sixteen years. Doctor Fordyce was, at one time, a councilor in the Nebraska State Medical Association. He was a lover of the outdoor life and wrote more than 550 articles dealing with this subject. The doctor is survived by his widow and by a daughter, Mrs. A. E. Spangberg, St. Joseph.

John Stewart, M.D., Santa Maria, Calif. Doctor Stewart, who formerly practiced in Stratton, Nebraska, died on July 18, after a long illness. He was a member of the Nebraska State Association from 1934 to 1940. The doctor is survived by his wife; a daughter, Lil; his mother, Mrs. W. E. Stewart; and his brother, Gene, all of Santa Maria.

John C. Iwersen, M.D., Omaha. Doctor Iwersen, a pediatrician, practiced his profession in Omaha for thirty-seven years, and recently celebrated fifty years of practice. He taught pediatrics at Creighton University School of Medicine. The doctor died, at age 75, following a heart attack on August 19. He is survived by his widow, Catherine; three sons, Joseph P. and Dr. Frank J., of Omaha, and Arthur E., a dental surgeon, of Harlan, Iowa; and a daughter, Mrs. Charles Lavering, of Omaha.

Human Interest Tales

Communications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. R. E. Klaas, Osceola, has moved his practice to Humphrey.

Dr. Kenneth Pierson, Norfolk, made a recent hunting trip to Montana.

Dr. Z. R. Boyd, San Bernardino, California, has set up his practice in Albion.

The wife of the late Dr. G. L. Pritchett, Fairbury, passed away on September 7 in Boulder, Colorado.

September 23rd marked Dr. J. E. Ingram's thirtieth year of service to the community of Nelson.

Dedication and opening services of the new Sacred Heart Hospital in Loup City were held October 25th.

Dr. H. E. Wallace of Lincoln was recently home on leave from his military duties at Fort Leonard Wood.

Dr. Robert C. Calkins, formerly of Beatrice, will be associated with Dr. R. S. Wycoff, Lexington, on October 1.

Dr. and Mrs. B. F. Stewart, Cambridge, were guests of honor at a dinner to observe Doctor Stewart's 84th birthday.

Dr. E. C. Hanisch, St. Paul, has returned home after several weeks in an Omaha hospital and has resumed his practice.

The State Board of Health chose Dr. J. E. M. Thomson, Lincoln, as its chairman at an organizational meeting recently.

Dr. R. C. Calkins, formerly of Beatrice, is now associated with Dr. R. S. Wycoff of Lexington in the practice of medicine.

Dr. H. S. Heim, Humboldt, gave an informative talk on "Drugs and Drug Addiction" at the weekly meeting of the Rotary club.

Dr. and Mrs. Vern F. Deyke have returned home to Columbus after attending a medical meeting in Colorado Springs, Colorado.

The Burt County Medical Society was host to the Tri-County Medical Association at Oakland during the middle of September.

Dr. K. J. Kennedy, Fairbury, presented a talk on polio, rheumatic fever, and cancer at the meeting of the Fairbury woman's club recently.

Dr. H. S. Reed's office in Guide Rock, suffered smoke damage as the result of a fire due to a faulty oil burner in the basement of the building.

Drs. Wendell Ford and Bernard Owen, Hemingford, have announced plans to extend their clinic work into the Mirage Flats and Hay Springs area.

Dr. H. D. Kuper, Columbus, returned home recently from Chicago where he spent two weeks doing postgraduate work at Cook County hospital.

Dr. W. R. Hamsa, Omaha, addressed the Tri-State Medical Society meeting at Shreveport, Louisiana as the orthopedic guest speaker, October 1st.

Dr. C. H. L. Stehl, Scribner, attended the first postgraduate course of the year at the University of Nebraska College of Medicine on September 22-23.

Dr. H. H. Rodman, is now practicing in Colorado Springs, Colorado. Doctor Rodman practiced medicine at Gibbon before entering service two years ago.

Dr. Leonard A. Dewey, former resident of Exeter, passed away recently in Seattle, Washington, where he was connected with the state health department.

Dr. and Mrs. Anton W. Skoog-Smith, Omaha, are planning to attend the American Roentgen Ray Society convention in Cincinnati, Ohio, September 26 to October 4.

Mrs. Charles T. Ingham, wife of Dr. C. T. Ingham, formerly of Coleridge, celebrated her 80th birthday in Alhambra, California, where the Inghams now live.

Dr. G. A. Morehouse and his daughter, Tobie, Stratton, were injured in a car-truck crash east of Benkelman on September 14. Neither was injured seriously.

The Eustis Lions' Club sponsored a "Dr. Rosenau Night" September 1st, in honor of the doctor's 25 years of service to Eustis residents and surrounding communities.

Dr. John Kahle, Jr., Oxford, is now interning at the San Bernardino, California hospital. Doctor Kahle is a graduate of the University of Nebraska College of Medicine.

Dr. W. R. Miller, formerly of Sterling, is now up and around with the aid of crutches following an accident near Axtell, Kansas, where he is now practicing medicine.

Dr. J. B. Redfield, North Platte, was chosen as one of the 10 district lieutenant governors of the Iowa-Nebraska Kiwanis district at the annual meeting in Grinnell, Iowa.

Dr. Grace Ketterman, Summerfield, has completed her internship at Memorial Hospital in Kansas City and has taken a position as assistant director of public health in that city.

Dr. W. J. McMartin, Omaha, addressed the summer quarter graduation exercises of the Memphis

Medical Unit of the University of Tennessee, September 28, at Memphis, Tenn.

Dr. Walter Harvey, Jr., Gering, has returned to duty aboard the troop transport ship, the General Walker, after spending a 10-day leave with his family during the early part of September.

Dr. T. D. Fitzgerald, Omaha, has resigned his position as assistant dean of the Creighton University School of Medicine, to enter private practice with Dr. John Broz of Alliance.

Dr. and Mrs. Elton Newman, Omaha, have moved to Salt Lake City where Dr. Newman will be associate professor of preventive medicine at the University of Utah College of Medicine.

Dr. James P. Donelan, a charter member of the Board of Life Insurance Medicine, attended the annual meeting of the Life Insurance Medical Directors Association in New York City, Oct. 13-16.

Approximately 20 members attended the Sixth District Medical Association September meeting at the Hotel McCloud in York. The program was presented by two Omaha doctors, John C. Coe and George Pinney.

Dr. A. E. Reeves, North Platte, has returned home from a 3-week trip to Alaska. While there, Dr. Reeves took an airplane trip north of the Arctic Circle. He also reported seeing large numbers of moose, reindeer, and bear.

The Medical Staff of St. Joseph Hospital, Osmond, held their annual meeting on September 21 and elected C. E. Rogers, M.D., President; H. J. Billerbeck, M.D., Vice President, and A. E. Mailliard, M.D., Secretary-Treasurer.

Dr. James Mailliard, Omaha, and Miss Rosemarie Ann Morback, Bellwood, were united in marriage at the St. Cecelia Cathedral on September 26th. Doctor Mailliard is a graduate of the University of Creighton School of Medicine.

The Nebraska Society for Crippled Children held its annual meeting October 14 at the Fontenelle hotel in Omaha. Dr. R. E. Bruner of Kansas City, a member of the American Academy on Cerebral Palsy, spoke at the luncheon.

Dr. David P. Finley, assistant professor of obstetrics and gynecology at the University of Nebraska College of Medicine, spoke at the annual meeting of the Michigan State Medical Society at Grand Rapids September 23rd.

Dr. Phillip Kolnick, Omaha, has arrived in Bayard to begin the practice of medicine. Doctor Kolnick leased the office and equipment of Dr. R. L. Spradling who is now attending Washington University School of Medicine in St. Louis.

The seventeenth annual convention of the Nebraska Hospital Association will be held in Lincoln, November 12. Dr. James F. Kelly, Omaha, president of the Nebraska State Medical Association, will explain the functions of the new State Board of Health.

Dr. Raymond F. Johnston, son of Dr. and Mrs. R. S. Johnston, Kearney, and Miss Barbara Jean Van Sickle, Hastings, were married in Los Vegas, Nevada, on August 27. Doctor Johnston is a graduate of the University of Nebraska College of Medicine.

Col. Robert J. Benford, formerly of Omaha, editor of the United States Armed Forces Medical Journal, was the official representative of the Department of Defense at a world wide meeting of medical editors September 7, at The Hague. Colonel Benford is a graduate of the University of Nebraska College of Medicine.

The election of Drs. F. G. Gillick, Dean of Creighton University School of Medicine and F. W. Niehaus, Professor of Medicine at University of Nebraska College of Medicine, to the Scientific Council of the American Heart Association was announced recently by Dr. F. Lowell Dunn, Omaha, president of the Nebraska Heart Association.

Drs. R. A. Youngman and Horace V. Munger were named co-chairmen of the Lancaster County Medical Society Joint Public Health and Public Welfare Advisory Committee to work with the County Welfare Department at the meeting of the society. Other members are, Drs. George Underwood, L. E. Sharrar, L. J. Owen, Rolland Mueller, Paul Peterson, Harry Taylor, and Janet Palmer.

Tuberculosis Abstracts

TREND OF TUBERCULOSIS MORBIDITY

In contrast to well-documented evidence of the marked decrease in mortality from tuberculosis during the past 50 years or more, there is a dearth of reliable information regarding morbidity from this disease. The number and ratio of deaths and reported cases are used, therefore, to estimate the trend of morbidity. Recent reports based upon these statistical data conclude pessimistically that, while the number of deaths and the death rates from tuberculosis have decreased considerably since 1900, the rate of development of new cases of this disease has not changed or is increasing.

It has been stated by Edwards and Drolet that "a widening gap is developing between the tuberculosis morbidity and mortality in the United States," while Drolet and Lowell conclude that "it is primarily institutional care, or rather improved medical and surgical treatment of active cases of tuberculosis, which is now modifying so favorably the mortality record. Where tuberculosis campaigns remain weak, however, is still in the field of prevention with regard to reducing outbreaks of new cases of tuberculosis."

The conclusions to be drawn from these statements are that tuberculosis is mainly a clinical problem and that tuberculosis control programs have failed to prevent the spread of the disease. In this paper the available morbidity data are reviewed in an effort to determine the trend of the incidence of tuberculosis for Upstate New York (New York State exclusive of New York City).

Before considering morbidity, however, the effect upon the reduction in death rate of institutional care, or of improved medical and surgical treatment of active cases of tuberculosis, needs consideration. In order to make it clear that factors other than hospitalization and treatment are involved in the declining death rate, it is only necessary to point out that the decline is not of recent origin. In Upstate New York facilities for the hospitalization of the tuberculous were quite limited until approximately 1915. During the early years of this century treatment was limited mainly to bed rest, with pneumothorax and surgery being used infrequently. Nevertheless during these years there was a continuous decrease in the death rate. Even after specific therapeutic measures came into common usage, their effect was not reflected by sharp changes in the death rate since 1900. Until recently the percentage of patients who received such specific treatment for tuberculosis was too small to affect the death rate significantly.

For additional evidence that the decrease in the tuberculosis death rate is not entirely dependent upon specific therapy, the experience in the control of tuberculosis among patients in state mental institutions may be cited. During the 10-year period beginning with 1941, the rate of decrease of tuberculosis mortality among these patients has been similar to that for New York State as a whole. This similarity in change in death rate among mental patients (whose average age is approximately 52) to that in the general population (with an average age of approximately 35) is an indication that factors other than specific treatment are also involved in the reduction of deaths from tuberculosis.

It appears, therefore, that the hospitalization of tuberculous patients and their treatment are not the only causes of the changes in death rates. Of equal importance to those concerned with the control of tuberculosis is the validity of the statement regarding failure in the preventive phase of tuberculosis campaigns.

Since accurate information regarding the incidence of tuberculosis in the general population is non-existent, Drolet and Lowell use the number of reported cases and the ratio of cases to deaths as indices of the rate of development of the disease. They discuss the marked decrease in the number of deaths from tuberculosis between 1930 and 1950, during which time the number of cases reported annually remained the same so that the ratio of cases to deaths ("community case fatality") decreased from 70 to 29 per cent. They infer that the incidence of tuberculosis has not decreased during this 20-year period.

These data, however, do not take into consideration the number of persons examined and the percentage yield of cases of tuberculosis. While the number of cases of tuberculosis reported annually may be a reasonably accurate index of the trend of the annual incidence rate, this is true only when case-finding activities remain at the same level year after year. In studying the trend in incidence, the percentage yield of cases of tuberculosis among those examined is more important than the total number of cases found annually. If the composition of the groups examined remains essentially unchanged and the rate of development of new cases is constant, the percentage yield of new cases should also remain constant. On the other hand, any change in percentage yield of new cases in such groups may be due to a corresponding change in the incidence rate. For the study of the trend in incidence, data obtained from official case-finding activities in Upstate New York are used.

Tuberculosis Hospital Clinics—In spite of an increase of 40 per cent in the number of persons examined in 1948-1950, compared with 1939-1941, there was a decrease in the number of cases reported from the clinics of state and local tuberculosis hospitals in Upstate New York. The percentage yield decreased 40 per cent during this time, from 2.8 to 1.7. Part of this decrease may be due to the fact that during the later years groups of patients reporting for roentgenograms only are included. Among these groups the tuberculosis case yield is lower than among contacts and suspects. The decrease in the total number of reported cases, as well as the lower case yield, is evidence of a decrease in the incidence of tuberculosis in the population served by these hospitals.

Community Survey and General Hospital Admissions—Similar results were obtained among persons examined in community surveys and those examined roentgenographically upon admission to general hospitals in Upstate New York. In spite of a 57 per cent increase in the number of examinations in 1950-1951, compared with 1948-1949, there was an increase of only 21 per cent in the number of cases diagnosed, while the percentage yield of cases of tuberculosis decreased 22.9 per cent. The lower percentage yield of new cases of tuberculosis in these large segments of the upstate population can be due only to a decrease in the rate of development of new cases. It is probable that this reduction in incidence is an important cause of the decrease in tuberculosis death rates.

A study of the total number of cases reported and the case rates for the past 16 years in Upstate New York shows that the ratio of cases per 100,000 population decreased from a three-year average of 99 in 1935-1937 to 68 for 1948-1950. Part of the decrease may be due to a larger number of persons examined in mass surveys, among whom the percentage yield is lower than among contacts, suspects, or hospital admissions. The fact that the trend over the years for the entire population is toward a lower rate, as it is in the special population groups just mentioned, suggests a similar basic cause, a reduction in the incidence of the disease.

In spite of the decreasing incidence and number of deaths, tuberculosis still remains high on the list of causes of illness and death, and requires continuation of all efforts for its control. Those concerned with the effect of tuberculosis upon the public health are, nevertheless, entitled to know that the disease is yielding to these effrots.

—By Julius Katz, M.D., The American Review of Tuberculosis, March, 1953.

In 1420, a Venetian inventor received the equivalent of $120,000 for his discovery of the process for making loaf sugar — an amount ten times greater than the cost of Columbus' first voyage to the New World.

DOCTOR . . . Please take each copy of your Journal home. The wives complain that they never get to read the Auxiliary column.

Progress in national studies on the problem of financing America's hospital care is described by the Commission on Financing of Hospital Care in a report just released.

The cost of hospital service for each day of patient care increased 79 per cent in the five years between 1946 and 1951 — from a national average of $9.39 to $16.71. The Commission seeks to determine what part of this increase is due to rise in costs and what part is the result of expansion in services and new techniques in treatment. The progress report emphasizes that to minimize rising hospital costs attention must be given to increased operating efficiency rather than curtailment of services.

The Commission, an independent non-governmental agency, was originally sponsored by the American Hospital Association "to study the costs of providing adequate hospital services and to determine the best systems of payment for such services." Under the chairmanship of Gordon Gray, president of the University of North Carolina, it is composed of 34 American leaders representing a cross-section of public interest. Working from a Chicago office, a full-time professional staff is assembling and analyzing source material for study by the working committees of the Commission, which include all its members and several panels of technical consultants. The final recommendations of the Commission will be made directly to the American public.

The Commission progress report points out that "the American public is demanding, getting and utilizing more hospital services than ever before." The hospital is becoming increasingly important not only in acute illness and emergency but as a community health agency.

Hospitals have been forced to transfer a larger and larger proportion of their costs to paying patients, since other sources of income such as endowment, charitable donations, and public welfare payments have not been sufficient to meet higher costs. The only protection against financial catastrophe for the individual patient, and the only substantial new contribution to hospital income, is the voluntary prepayment program.

Over half the population now has some form of prepaid protection against the costs of hospitalization. What proportion of the national hospital bill is now paid by such means? Is extension of coverage by voluntary plans a solution to the problem of financing hospital care for all Americans? How is the use of hospital services related to prepayment? These questions are on the Commission agenda.

Through a series of grass roots conferences held in five regions of the nation, the Commission determined the aspects of hospital financing considered by these groups as most important for investigation. The most urgent problems were found to be (1) determination of the elements of hospital costs and means by which costs may be held to a minimum; (2) the role of physician hospital relationships as a factor in hospital costs; (3) financing of hospital care for non-wage and low income groups; (4) and the use of voluntary prepayment as a means of meeting the costs of hospital care.

A number of separate reports — some planned as detailed technical studies and others as general reports giving the findings and conclusions of the working committees — are contemplated by the Commission. The general reports have been outlined as follows:.

"Financing Hospital Care for Non-Wage and Low Income Groups" will develop, for public discussion, proposals for financing care for those who cannot be expected to participate in prepayment plans on the same basis as the currently employed.

"Prepayment and the Community" will evaluate the role of prepayment plans in financing care in community hospitals, and the means for more effective and efficient use of prepayment in financing the community hospital system.

"Hospitals and the Community" will evaluate the present and potential role of hospitals in providing community health services. It will set forth the Commission's findings on elements of hospital cost and the factors that influence those elements, and it will present the means to achieve coordination in planning and operation of community hospitals, and to promote understanding by hospitals and communities of their mutual responsibilities.

The final report of the Commission, "Financing Hospital Care for the American people," will summarize all findings and recommendations.

Vocational rehabilitation of the adult Cerebral Palsied in United States could stop a drain of $500,000,000 a year on the national economy, Karl K. Van Meter, of New York, national Executive Director of United Cerebral Palsy, declared at a hearing on major health problems by the House of Representatives Committee on Interstate and Foreign Commerce.

Speaking on behalf of the only nation-wide voluntary health organization devoted exclusively to a united attack on cerebral palsy, Mr. Van Meter pointed out that there are an estimated 350,000 adult Cerebral Palsied in the nation, most of whom have normal life expectancies.

"Assuming that 10 per cent of the adults are self-supporting," he explained, "the remainder of 315,000 require at least $600 a year for their maintenance, a total of $189,000,000 a year."

On the other hand, if these 315,000 could be rehabilitated and made employable even at the rate of only $1,000 a year, he added, "the difference from an economic standpoint would be over half-a-billion dollars."

"Therefore, gentlemen, you realize that this is not purely a medical problem," said Mr. Van Meter. "It affects the national economy and should be treated accordingly. The difference of half-a-billon dollars in our economic structure must be the concern of those who guide our destinies in this great capitol. We sincerely hope that your committee can find a satisfactory solution to this serious problem."

In response to an urgent cable, Parke, Davis & Company recently air-expressed to Santiago, Chile, a gift of 6,000 doses of Chloromycetin for use in the Central Chile area which was hit severely by earthquake May 6.

The Nebraska State Medical Journal

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EDITORIAL

STATE MEDICAL JOURNALS

The favorable position of state medical journals in the field of medical literature is indicated by considerable data recently presented by Mr. Alfred J. Jackson, Director of the State Journal Advertising Bureau. Two of the items Mr. Jackson stressed relate to the quality and wide diversity of scientific material printed in state medical journals, and to the general readership interest in these publications.

As judged by the number of articles abstracted from state medical journals by the Journal of the American Medical Association, Modern Medicine, and Current Medical Digest, state medical journals comprise the largest simple source of editorial content used in all abstracting journals. The average number of articles abstracted from each state medical journal is six per year. The average for all other medical publications falls well below this figure. The Nebraska State Medical Journal ranks with the average. This speaks well for the quality of scientific material published by this group of journals.

A survey, made in 1951, showed that, amongst the 1,000 physicians interviewed, state medical journals occupied a very high position in readership interest—second place. This survey was conducted amongst both specialists and general practitioners. The fact that readership was so high, even among specialists, is probably because these journals carry a substantial number of articles of interest to practitioners in practically every specialty. Such wide diversity is, of course, the aim and hope of the editors.

Readership and scientific interest in your state medical journal, it must be evident, are dependent, largely, upon you. Your editor urges each member of the Nebraska State Medical Association to use his journal more frequently to convey to the medical profession the results of his investigations and clinical observations.

DOCTORS, HOSPITALS, AND MEDICAL RECORDS

(Guest Editorial)

The passing of years has brought many changes to medical practice because physicians perform their duties, not .in a world of their own, but in relation to the society in which they live. Some of these changes, like the development of the automobile and our system of highways, have brought an increase in the efficiency with which the physician goes to the patient. They have also made it possible for the patient to more readily go to the physician. More of the physician's time is thus made available for patient care. Not only to further extend the efficiency with which the doctor uses his time for the benefit of his patient, but to provide a higher quality of care for the patient, the hospital has developed as a meeting place of patient and physician.

The ever increasing demand for hospital beds indicates how completely the population has given up a once common opinion that hospitalization was only for the patient with a terminal illness.

The improved quality of care afforded the hospitalized patient results, to a great extent, from a combination of physical facilities and specialized services that can be brought together in one place for the relief of human illness. There can be no doubt that this type of practice makes for more efficient use of the physician's time. It is equally true that if the hospital is to provide the best service, there are responsibilities that, while present, were somewhat less obvious when, in a former day, the physician dispensed from his saddle bag.

Increasing organizational complexity requires a corresponding increase in the effectiveness of communication. A hospital is not an exception unless it would serve only as a place for domiciliary care. The medical record may be considered the medium of communication for all the individuals who contribute directly to the welfare of the hospitalized patient. The most carefully performed laboratory procedure is of little benefit to the patient, to medical education, or to research, unless the written report is attached to the patient's record, and available to the physician responsible for the patient. The same may be said for the services of the radiologist, of the pathologist, or of the nurse. The most important contribution to the patient's recovery is by the attending physician, and it is important that his findings and his opinions also be a part of the written record. The medical record should be an encyclopedia of information pertaining to the patient, his illness, and his treatment.

Some of the practical utility of complete medical records is well known. The ever increasing number of reports to be completed for insurance claims constantly proves their worth. The value of adequate records in protecting the legal rights, not only of the patient, but also of the physician, should be well known.

Another aspect of medical records is less well known although it has been referred to in the text of articles appearing in popular periodicals, and, unfortunately, often in a manner that is critical of our activities. The medical record reflects the quality of medical care furnished by the physician, and the team which he directs, working in the hospital. A diligent hospital staff, like a responsible hospital administration, is eager to furnish the best possible quality of care. If we adhere to the scientific method in the care of our patients we can not but be interested in the scientific evaluation of our results.

The American College of Surgeons, joined by other organizations interested in the accreditation of hospitals, has for a long time stressed the correlation between adequate medical records and a high quality of medical practice.

Greater success might be expected if the impetus for good medical records, and their careful study, came from the physician concerned in providing good hospital care rather than from the pressure of an accrediting agency. An analogy has been drawn between the medical evaluation of a hospital and the financial record of a business. A balance sheet can accurately reflect the financial state of an organization only if it is based upon accurate records of each transaction. The medical balance sheet can be an accurate one only if the individual physician accepts responsibility for the completion of its component transactions.

Such evaluations have introduced new terms into hospital parlance. These terms, such as "medical audit" and "tissue committee," have also appeared in the popular press. They are terms which imply responsibility, within the profession, for the scientific evaluation of our results, and if they are found less than ideal, then for their correction. They can be a means to the better utilization of our hospital facilities. There can be no better answer to those who would criticize our profession than to offer real and objective evidence of the quality of care received by our patients in a free society.

RICHARD L. EGAN.

HEALTH OF TEEN-AGERS

The leading cause of death from disease throughout the teen-age period is cancer and other malignant tumors, these accounting for about one fifth of the deaths from natural causes in each age and sex category. Leukemia, the major condition among the malignancies, was responsible for one half of these deaths at ages 13-14 years and for about one third at ages 18-19 years. Ranking next in importance to the cancer group are diseases of the heart, including rheumatic fever; for these diseases, the death rates rise steadily with age. Tuberculosis is now relatively unimportant as a cause of death among teen-agers, except among girls at 18-19 years, where it accounts for about one ninth of all deaths from disease. Currently, acute poliomyelitis outranks tuberculosis in the mortality picture at the earlier teen ages.

—Statistical Bulletin (Metropolitan Life Insurance Company), August, 1953.

FROM THE EVENING WORLD-HERALD, OMAHA, THURS, AUG. 30, 1953—

No wonder we're so healthy in Nebraska. There's a doctor for every 1,009 Cornhuskers, slightly better than the national average (one medico per 1,098 persons). Iowa's ratio is 1 to 1,121.

New York, with 626 physicians per patient, has the highest concentration of healers.

The Roentgenological Manifestations of Injury to the Cardiovascular System*

ELMER A. LODMELL, Col., M.C., U. S. Army
Walter Reed Army Medical Center
Washington, D. C.

This treatise is based on injuries to the heart, pericardium, and blood vessels received by soldiers, mostly by direct wounds, but shows that similar injuries may well occur in civil life. The author presents beautiful x-ray studies of various cardiac and vascular injuries, both pre- and postoperative, illustrating the fact that adequate diagnostic study followed by appropriate surgical treatment may restore many of these patients to life and health.

EDITOR

Serious injury to the heart, pericardium, and great vessels is so frequently fatal that little opportunity is afforded the physician to make an accurate diagnosis, or to institute definitive treatment before death. Nonfatal injury to the cardiovascular system occurs rather infrequently and it is this type of injury that I wish to discuss today. Although all of the cases to be presented concern young men in military service, not all of them were injured in actual combat. It is believed that similar injuries can, and do occur among individuals engaged in civilian activities, and that the incidence of injuries to the cardiovascular system is about the same in both combat and non-combat situations.

Harken(1) in 1946 reported an incidence of injuries to the heart and pericardium of approximately 15 per 10,000 battle casualties evacuated to hospitals in the United Kingdom during World War II. Injuries to the arteries occur somewhat more frequently, and according to de Bakey(2) they constituted approximately 1.4 per cent of battle injuries during the last war. His figures include only the fresh or acute injuries and do not include such late manifestations as traumatic aneurysm, and fistula.

The diagnosis of injury to the heart, pericardium, and arteries can, in most cases, be made by the usual methods employed in physical diagnosis. X-ray examination is important in correlating and confirming clinical impressions. In the detection of foreign bodies in the myocardium, fluoroscopy and roentgen kymography are probably the most important diagnostic procedures, and for the demonstration of the location and extent of traumatic aneurysm, and of arteriovenous fistula, arteriography is of great value.

The presence of unusual enlargement of the cardiac silhouette following severe trauma to the chest by a sharp instrument, or by blunt force, may lead to a tentative diagnosis of:

1. Hemorrhage into the pericardium.
2. Pericardial effusion.
3. Rupture of the myocardium.

The presence of metallic foreign bodies in the myocardium, or cardiac chambers, may not be recognized unless special means are employed to locate them. Small metallic foreign bodies in the myocardium may not be seen on routine films because of the motion imparted to them by the myocardium.

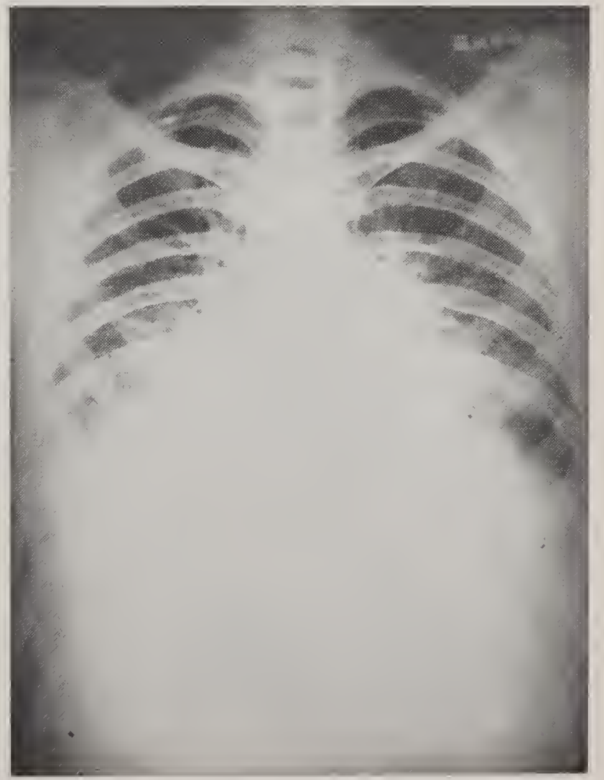

Figure 1 (Case I)

Roentgenogram showing cardiac enlargement, pulmonary congestion, pleural fluid, and fracture of right fifth rib.

The following are examples of these conditions:

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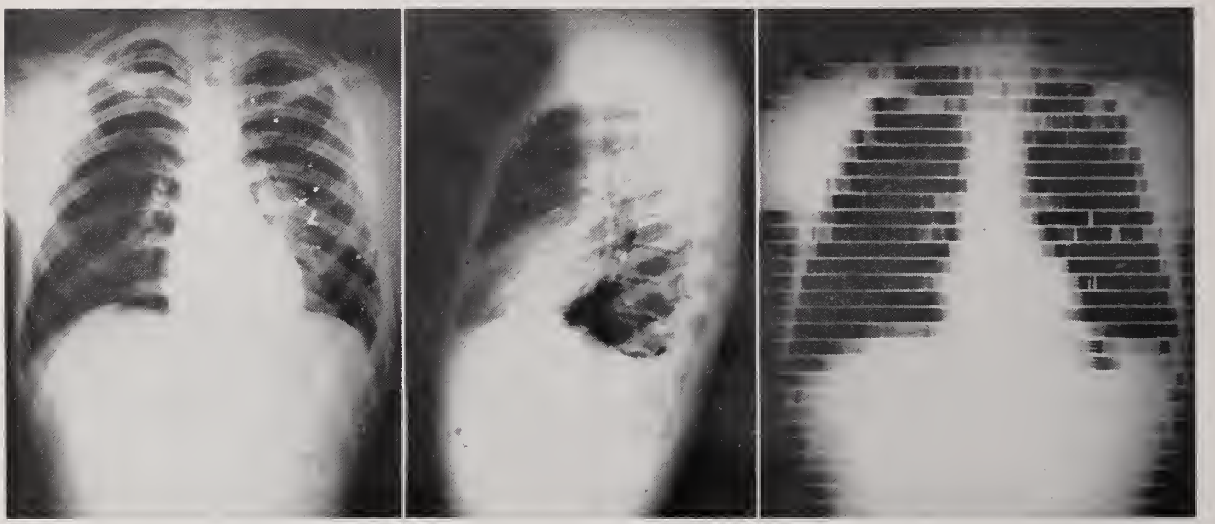
*Presented at the Annual Session, Nebraska State Medical Association, May 12, 1953.

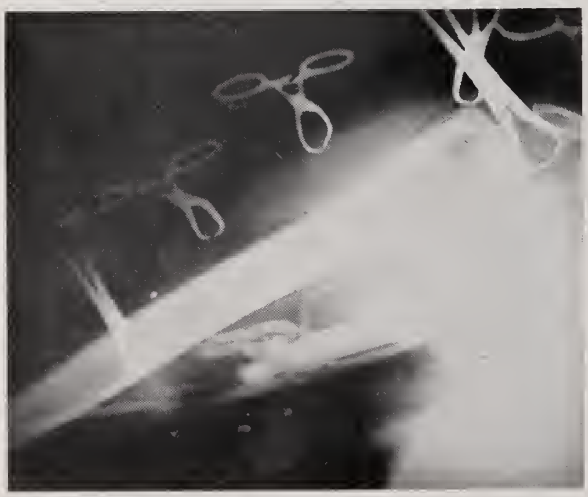


(a) (b) (c)

Figure 2 (Case II)

Frontal (a) and lateral (b) projections of the chest showing unsharpness of outline of metallic foreign body near apex of heart, and roentgenkymogram (c) showing motion of foreign body synchronous with myocardial contraction.

Case I, previously reported by Pollock(3), concerns a white male of twenty-one years who was thrown forward against the steering wheel when his car plunged over an embankment. He was admitted to Letterman Army Hospital four days later complaining of shortness of breath, pain, cough, and bloody expectoration. Roentgenograms of the chest showed a fracture of the right fifth rib, pleural fluid, and cardiac enlargement. (Fig. 1). The roentgen signs of cardiac enlargement and failure occurring in a previously healthy young man so soon after injury were sufficient to justify a tentative diagnosis of rupture of the myocardium. He died sixty-four (64) days after injury and autopsy showed a rupture of the interventricular septum.

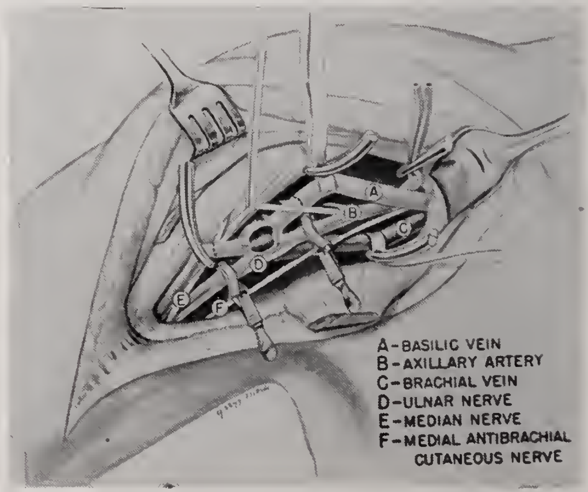


(3a)

Figure 3 (Case III)

a. Arteriogram showing communication between the brachial artery and the basilic vein.

Case II. A white male of eighteen years received multiple shell-fragment-wounds of the face and chest, in Korea, on 8 September, 1950. On his arrival at Letterman Army Hospital, about 1 month later, an x-ray examination of the chest showed numerous metallic foreign bodies in the chest wall, and three (3) in close association with the heart shadow (Fig. 2 a and 2 b). The largest shadow was hazy and indistinct because of motion. Fluoroscopic and kymographic studies (Fig. 2 c) confirmed the belief that it was in the myocardium at the apex of the left ventricle. It was removed surgically from that location.



(3b)

Figure 3 (Case III)

b. Artist's drawing showing arteriovenous fistula.

The following cases were selected from among twenty-seven (27) patients with arterial damage admitted to Letterman Army Hospital during the past 3 years. In this group there were thirty-three lesions — 19 false aneurysms and 14 arteriovenous fistulas. Arteriography was employed to demonstrate the location and extent of vascular damage in thirteen (13) patients. Arteriography is seldom, if ever, necessary to establish a diagnosis of traumatic aneurysm, or of arteriovenous fistula of peripheral vessels. The diagnosis can usually be made by such physical signs as swelling, pulsation, palpable thrill, bruit, and changes in color and temperature. Arteriography of peripheral vessels is important in that it provides the surgeon with valuable information regarding:

1. The character of the lesion,
2. The location and extent of the injury,
3. The adequacy of the collateral circulation, and
4. The magnitude of the operative procedure necessary to treat the lesion.

In the majority of our cases in which arteriography was done, 35 per cent diodrast was injected percutaneously, in the radiographic room, and serial films were made, at intervals of from one-half to one second, in an automatic cassette changer. In some cases it was necessary to expose the artery before the injection was made. Heart rate, circulation time in the affected part, and the size of the false aneurysm or of the arteriovenous communication were important in determining the interval between exposures and the total number of films to be exposed. The first film was usually exposed within one second of the beginning of the injection and no more than eight films were made per examination. In two cases the roentgenographic picture was not consistent with physical findings, therefore the examination was repeated. In one case the deep femoral artery was injected and the resulting picture led to an erroneous diagnosis of thrombosis of the femoral artery. At the second injection the femoral artery was entered and the lesion was accurately demonstrated. In one case the rapid flow of the contrast medium through multiple arteriovenous communications did not permit the passage of diodrast to the most distal and largest fistula so that its presence was not recognized and a second operation was necessary to complete the repair. The following cases have been selected to demonstrate the various types of arterial injury. Although most of them

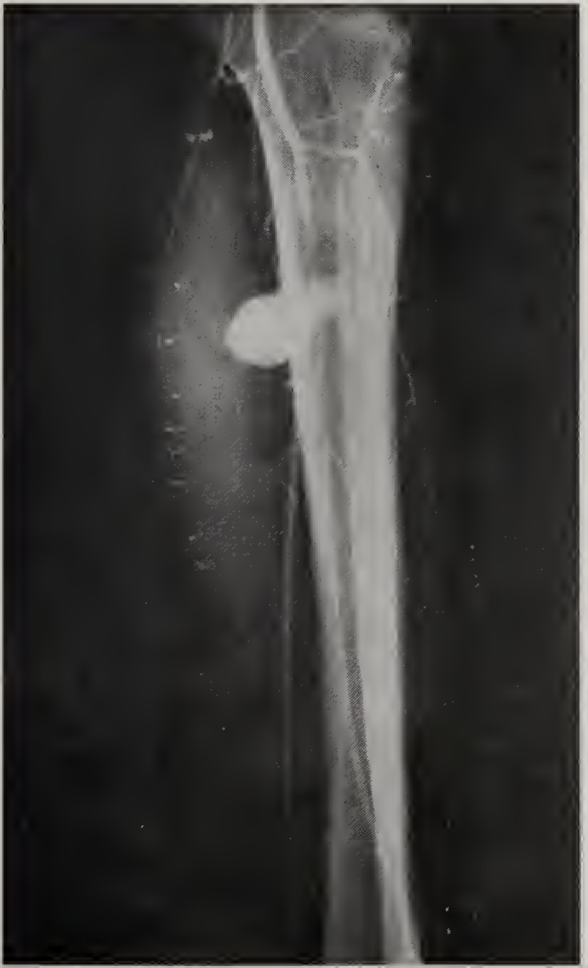


Figure 4 (Case IV)

Arteriogram showing large false aneurysm of posterior tibial artery.

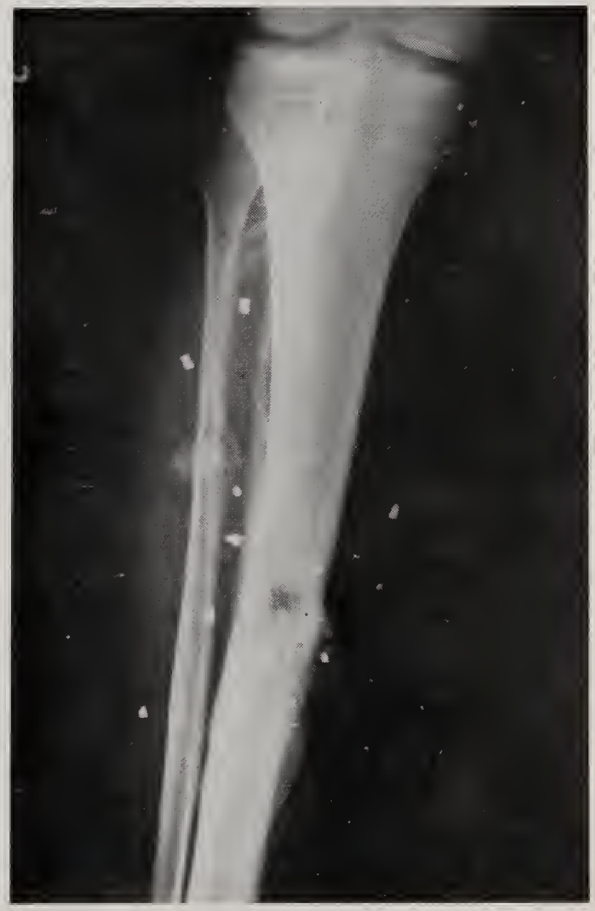
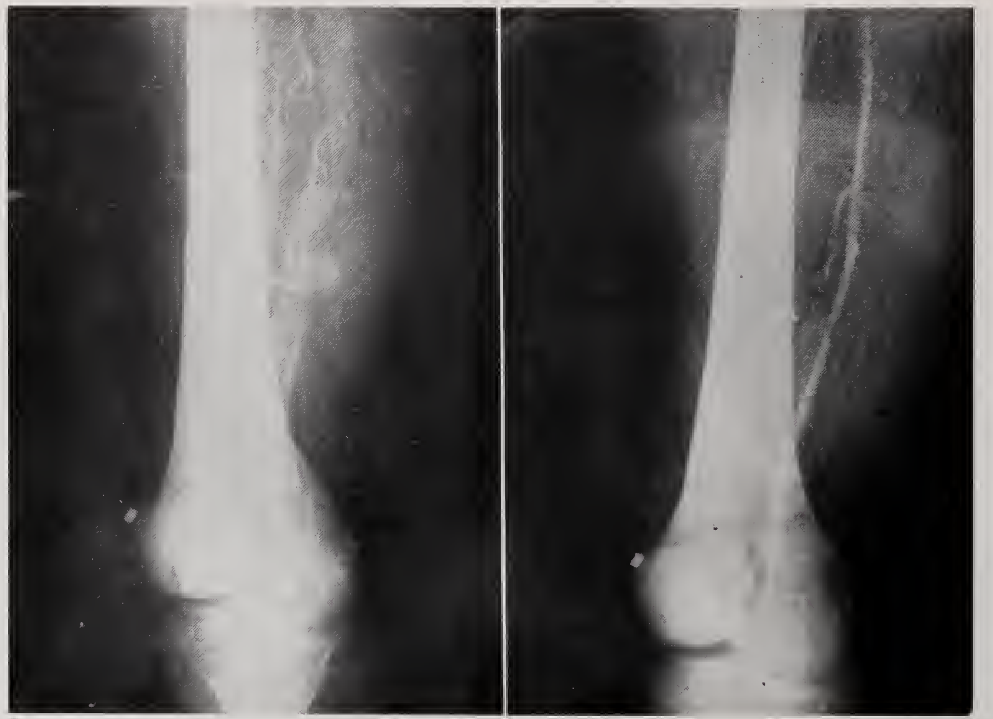


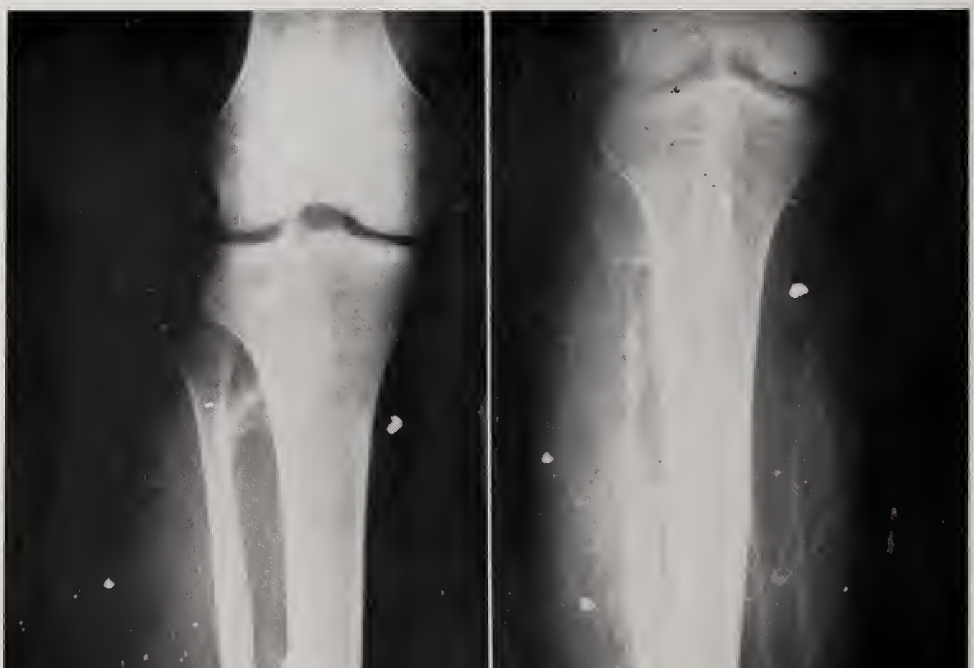
Figure 5 (Case V)

Arteriogram showing traumatic aneurysm of anterior tibial artery, and aneurysm and arteriovenous fistula of posterior tibial artery.



(6a) Figure 6 (Case VI) (6b)

Preoperative arteriogram (a) showing arteriovenous fistula of femoral artery, and postoperative arteriogram, (b) showing restoration of continuity after repair of fistula.

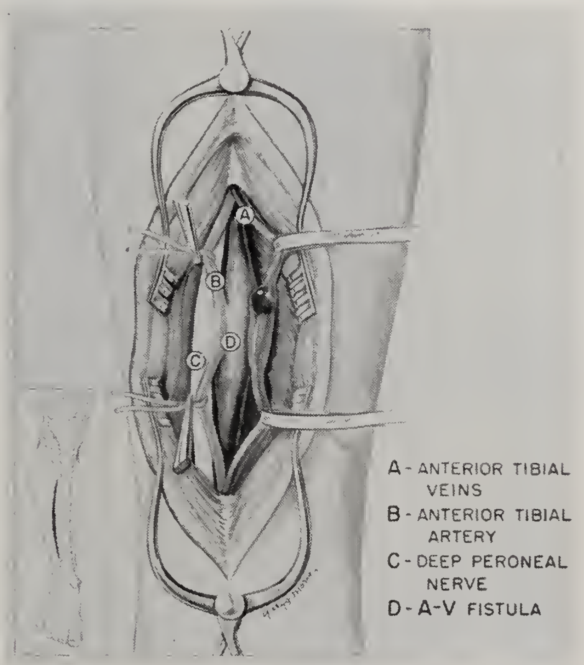


(7a) Figure 7 (Case VII) (7b)

a. First arteriogram showing arteriovenous fistula involving anterior tibial artery.

b. Postoperative arteriogram showing previously unrecognized arteriovenous fistula of anterior tibial artery after several smaller fistulas at a higher level had been repaired.

occurred in combat they represent types that might occur in association with comminuted fractures or penetrating wounds of any nature.



(7c)
Figure 7 (Case VII
c. Artist's drawing of arteriovenous fistula found at second operation.

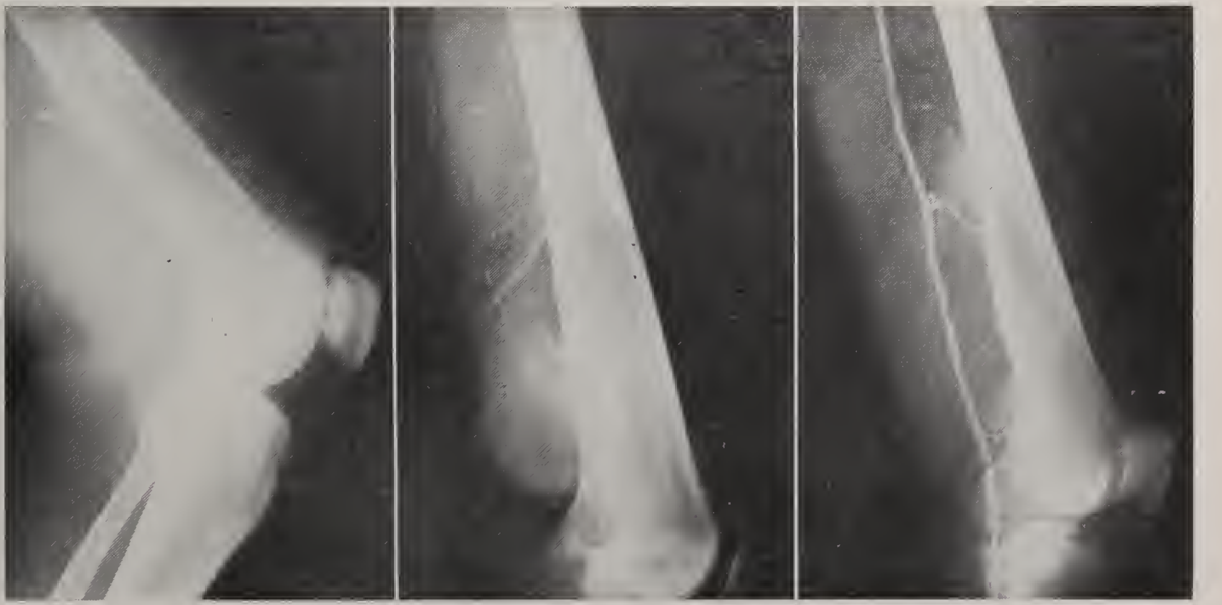
Case III. A 26-year-old white male received multiple mortar fragment wounds of the chest, neck, and arms, in Korea, in September, 1951. An arteriogram done in the operating room in March, 1952, showed a fistula between the brachial artery and the basilic vein. The vein was ligated and the artery repaired with good results, however some edema of the arm persisted. (Fig. 3 a and b).

Case IV. A white male of 21 years received multiple wounds of the face and extremities, in Korea, in October, 1951. After treatment of his facial wounds at an overseas hospital he was returned to the U. S. and admitted to Letterman Army Hospital on 21 November, 1951. A femoral arteriogram was done on 3 January, 1952 (Fig. 4), which showed an aneurysm of the posterior tibial artery. A successful aneurysmorrhaphy was done several days later.

Case V. A white male of 22 years received multiple gunshot wounds of the right leg and compound fractures of the tibia and fibula, in Korea, in October, 1951. An arteriogram, made in January, 1952 (Fig. 5), showed an arteriovenous fistula of the posterior tibial artery and a false aneurysm of the anterior tibial artery. The arteries could not be repaired and multiple ligations were done with good results.

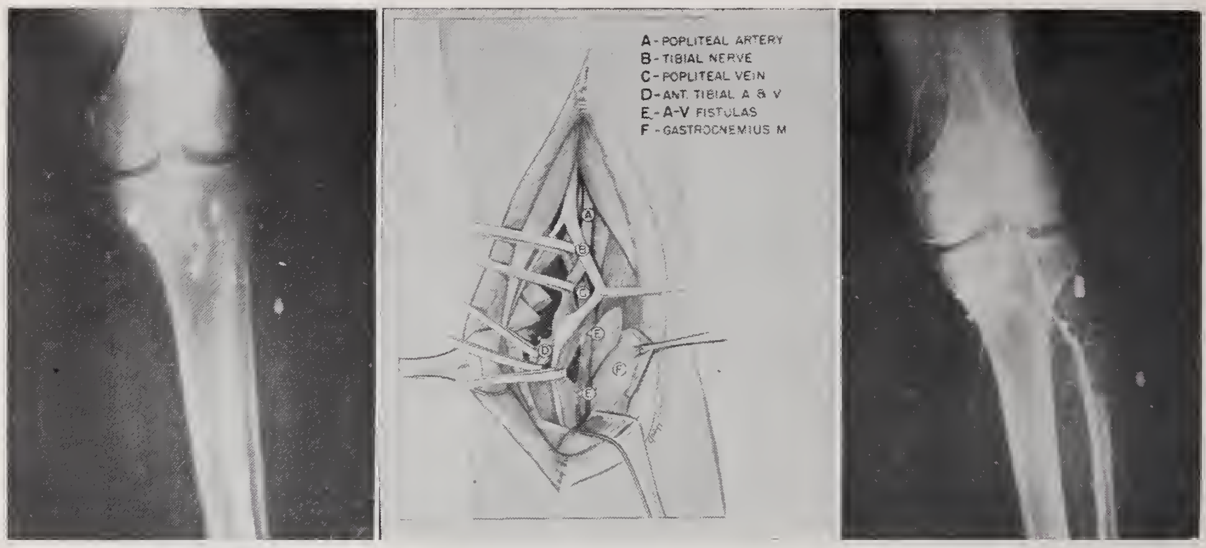
Case VI. A white male of 26 years was wounded by fragments of a land mine, in Korea, in August, 1951. He sustained an injury to the peroneal nerve and an arteriovenous fistula of the femoral artery. (Fig. 6 a). At operation the fistula was excised and the artery and vein repaired by transverse sutures. (Fig. 6 b).

Case VII. A white male of 21 years received injuries to the right leg, by mortar fragments, in Korea, in October, 1951. The wounds healed readily but in January, 1952, he began to complain of cramping pain, easy fatigability, and tingling sensations. An arteriogram showed an arteriovenous communication in the region of the origin of the anterior tibial artery (Fig. 7 a). At operation numerous small arteriovenous fistulas were found and ligated. The wound was closed when careful examination, including ausculation and palpation, failed



(8a) (8b) (8c)

Fig. 8 (Case VIII)
a. Film showing sharp exostosis on femur and large soft tissue swelling of thigh.
b. Arteriogram showing large false aneurysm of popliteal artery.
c. Postoperative arteriogram showing restoration of popliteal artery and absence of exostosis.



(9a) (9b) (9c)

Figure 9 (Case IX)

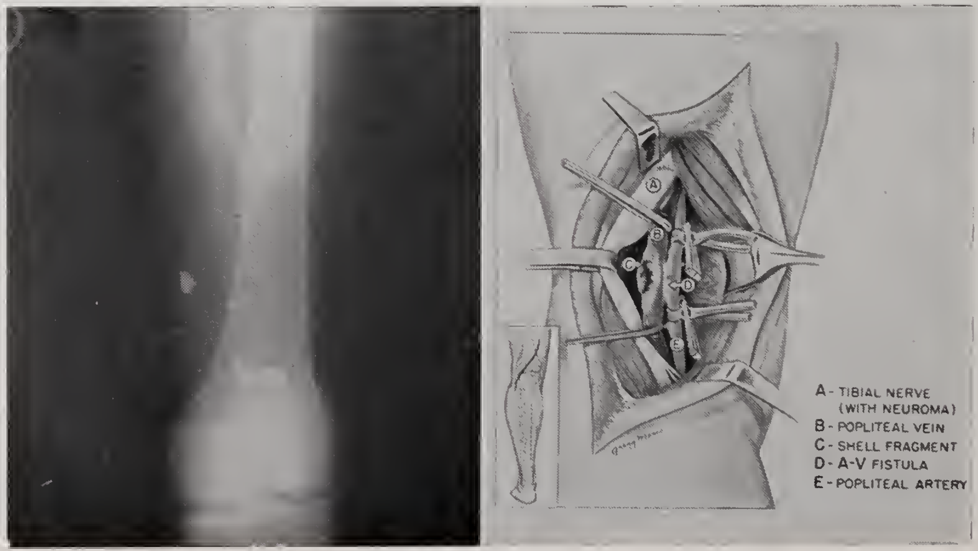
a. Arteriogram showing aneurysm of popliteal artery and arteriovenous fistula of posterior tibial artery.
b. Artist's drawing of damaged vessels.
c. Postoperative arteriogram after ligation of damaged vessels.

to disclose any evidence of further involvement. A postoperative arteriogram (Fig. 7 b) showed the presence of a large arteriovenous fistula at a lower level. This was repaired at a later date. (Fig. 7 c).

Case VIII. This case is quite unusual and concerns a white male of 26 years who was struck by an automobile on 16 June, 1952. The front wheel of the car ran over his knee. He suffered some pain but was disabled for only a few days. About two months later he began to complain of painful swelling of the left thigh. Symptoms increased in serevity and he lost 24 lbs. (10.9 kg.) in weight and had occasional chills and fever. Upon admission to an Army hospital in October, 1952, the physical and roentgen findings (Fig. 8 a) led to a tentative diagnosis of malignant tumor. An arteriogram (Fig. 8 b), however, showed a large traumatic aneurysm of the popliteal artery, apparently due to perforation of the artery by a sharp exostosis on the posterior aspect of the femur. At operation about 700 c.c. of old blood clot were removed, the exostosis removed, and the artery repaired. A postoperative arteriogram (Fig. 8 c) showed good restoration of continuity of the artery.

Case IX. A white male of 25 years was injured by shell fragments, in Korea, in the summer of 1952. An arteriogram (Fig. 9 a), performed several months later, showed a false aneurysm of the popliteal artery and an arteriovenous fistula of the posterior tibial artery. At operation multiple ligations were performed. (Fig. 9 b, c).

Case X. A white male of 20 years was injured by shell fragments, in Korea, in the fall of 1952.



(10a) (10b)

Figure 10 (Case X)

a. Arteriogram showing arteriovenous fistula of popliteal artery.
b. Artist's drawing showing relationship of metallic foreign bodies to the arteriovenous fistula.

An arteriogram (Fig. 10 a), done in January, 1953, showed an arteriovenous fistula of the popliteal artery. At operation (Fig. 10 b) the fistula was repaired and the continuity of the vessels restored.

SUMMARY

Several cases of traumatic injury to the cardiovascular system have been discussed. An attempt has been made to show that fluoroscopy and roentgenkymography are of considerable value in confirming the clinical diagnosis of injury to the heart and pericardium and that arteriography is of great value in demonstrating the true nature and extent of peripheral arterial damage.

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Glomerulonephritis, A Review*

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The author provides a connected exposition of the clinical features of glomerulonephritis. This portrayal carries the reader smoothly through the various stages of this disease, whether these stages be compressed into a few weeks time or stretched into a matter of years. Explanation of the controversial points, such as the cause of the anemia, the low metabolism rate, the hypercholesteremia, etc., are offered, and are based on the present opinions as gleaned from the literature. Suggestions for treatment based on the obvious physiologic abnormalities, are outlined.

EDITOR

In this presentation an attempt will be made to review the course of glomerulonephritis from the initial to the terminal stage. The importance of microscopic examinations of the urinary sediment, the principles of therapy and the clinical variants of this disease will be stressed.

Etiology — Despite the highly controversial literature there is general agreement on many of the following concepts of the etiology of the disease. In approximately ninety per cent of patients with acute glomerulonephritis there is a preceding beta hemolytic streptococcic infection(1, 2, 3) and an elevated antistreptolysin titer(4). Upper respiratory infections, especially tonsillitis, sore throats, scarlatina, bronchitis, otitis media and sinusitis, antedate glomerulonephritis in approximately seventy-five per cent of patients(1, 5-8). Also, infections of operative sites and of the skin and subcutaneous tissue(9) have been emphasized as initiating factors in acute nephritis. The usual interval between the acute infection and the nephritis is one to three weeks.

Acute glomerulonephritis is considered a disease of childhood. No age, however, is immune. In Kurtke's review(8) forty per cent of 600 cases appeared in the first decade, eighty per cent had occurred before the age of 30, and ninety-six per cent before the age of 50 years. Addis(7) reports a case of acute glomerulonephritis in an infant six months old and in a woman 87 years of age.

Because of possible related etiological factors implicating beta hemolytic streptococcic organisms there have been many studies on the co-existence of rheumatic fever and glomerulonephritis(2, 10, 11). Although most studies show that true glomerulonephritis occurs in only one per cent of patients with rheumatic fever, Hartman and Bland(12) report a five per cent incidence. Proteinuria, casts and cells may appear in the urinary sediment during febrile episodes of rheumatic fever, possibly related to the so called larval nephroses(2) that accompany febrile states.

The reported incidence of glomerulonephritis following scarlatinal infections has varied considerably, ranging from 1 to 70 per cent(2, 7, 10, 13-16). This variation in incidence seems at least partly related to the nature of the epidemic. The severity of scarlet fever, however, bears no relationship to the onset of nephritis as evidenced by the fact that glomerulonephritis may follow either mild or severe cases of scarlet fever. It has been shown that nephritis is more apt to occur in children than in adults, after a bout of scarlet fever(2, 17).

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*Presented at joint seminar conducted by the Department of Medicine, Veteran's Administration Hospital, and Department of Pathology, University of Nebraska College of Medicine, Omaha, Nebraska.

Reviewed by the VA and published with the approval of the Chief Medical Director. The statements and conclusions published by the author are a result of his own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

While the pathogensis of glomerulonephritis is not completely established, an immunologic mechanism has been implicated. Support for this thesis is based on the experimental production of nephritis (18-24) as well as the low level of serum complement in this disease(25-27). The postulated antigen-antibody basis for the development of glomerulonephritis is shown in Figure I. A streptococcal infection initiates the process by altering kidney proteins (antigen A). The resulting circulating antigen (altered kidney protein) stimulates the formation of antibody. When the antibody titer reaches its peak, it reacts with kidney protein of the glomerulus. This reaction, in the presence of complement, produces the lesions of acute nephritis, resulting in depressed levels of serum complement.

ANTIGEN-ANTIBODY REACTIONS IN NEPHRITIS

1. Strept. → Strept. principle + Kidney protein → Antibody A
(Haptene) (Antigen A)

2. Antibody A + Kidney protein + Complement → Acute glomerulonephritis
(Antigen B)

Figure 1. Effect of streptococcal products on the kidney resulting in a kidney—bacterial antigen. The antibodies produced react with the kidney to produce glomerulonephritis. Based on concepts of Schwentker and Comploier(18), and Caveltis(21).

CLINICAL FEATURES

In the following clinical description of nephritis it should be recognized that blending of one stage into another occurs. This aspect of the disease and the salient features of each stage are illustrated in Figure 2. A patient in the later stages of the degenerative phase of glomerulonephritis may also exhibit features of the terminal stages of the disease. On the other hand, in the early stages of the degenerative phase, there may be elements of the initial stage as well. Such a concept provides a more dynamic approach to this disease than would a rigid diagnostic classification.

Acute glomerulonephritis—The three cardinal features commonly described in the acute (initial) stage of glomerulonephritis are hematuria, hypertension, and edema. While these symptoms may be present in a classical case they are not essential for diagnosis. Changes in the urinary sediment, however, are necessary for the diagnosis. Hematuria may be evident microscopically or grossly. Gross hematuria may be manifested by discoloration varying from a faintly tinged urine to one which is smoky or coffee-colored due to the formation of acid hematin in an acid urine.

Hypertension occurs in approximately seventy per cent of patients in the acute stage of nephritis(28). Cerebral manifestations including headaches, nausea and vomiting, mental confusion, and convulsions, have been ascribed to the hypertension. The height of the blood pressure is of no value in predicting the immediate or eventual prognosis. The mechanism of the hypertension is unknown. Volhard(29) considered it to be due to generalized angiospasm while others(30) have suggested that renal ischemia, simulating the Goldblatt type of kidney, is responsible for the hypertension.

According to Hayman & Martin's report(28), edema occurs in approximately fifty-nine per cent of the patients with acute nephritis. The classical concept that the edema is due to a generalized increased capillary permability has recently been challenged by the observations of Warren & Stead(31) and Ladue(32). They found a low protein content of the edema fluid, simulating cardiac edema, and an increased peripheral venous pressure in their patients with acute nephritis, and, accordingly, suggested that the edema was a manifestation of cardiac failure. The incidence of congestive failure in acute nephritis has been said to vary widely, ranging from 17 per cent to 90 per cent(32-34). According to Whitehall, Longcope and Williams(35), the incidence of congestive failure is related to the severity of the nephritis.

Other features observed with variable frequency include fever, pain in lumbar and abdominal areas, pulmonary edema, pleural effusion, anuria, dysuria, and oliguria.

Urinary abnormalities are prominent in this stage of nephritis and include proteinuria and urinary sediment changes. Proteinuria is usually 2 to 4 grams a day. The urinary sediment in the initial phase of the disease, containing mixed blood and epithelial casts, is a distinctive feature. Since the various stages of nephritis are typified by a definite pattern of urinary sediment, careful and repeated microscopic examinations of the urine are mandatory in order to adequately follow the course of the disease.

Anemia, if present, is mild. The sedimentation rate is increased and serial determinations are of value in deciding when physical activity may be allowed. A moderately elevated blood urea nitrogen may be found, as well as a temporary reduction of inulin and of urea clearances(36).

Complete recovery is to be expected in eighty per cent of these patients. The length of time required for complete recovery may range from several months to two years(7). The majority of patients show evidence of improvement in six months or less, although the urinary sediment may continue to be abnormal for a year or more(7). The possible pathways to healing are shown in Figure 3.

It has been estimated(5, 7, 28) that the mortality rate in cases of acute nephritis is between five and ten per cent. The cause of death is usually one of the following conditions: (1) hypertensive encephalopathy; (2) heart failure; (3) uremia; and, (4) infection.

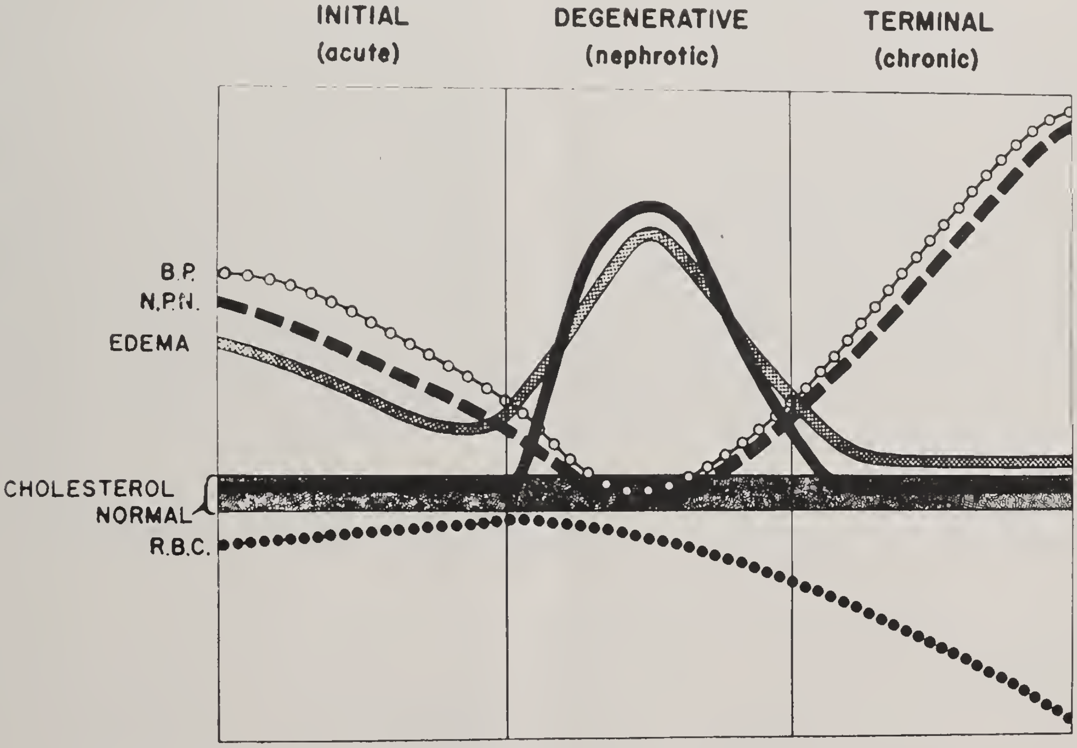

Figure 2. Spectral concept of nephritis illustrating a transition from one stage to another and a range from the mild to the severe. Based on concepts of Addis(7).

Latent Nephritis — Glomerulonephritis may become latent at any time during the course of the disease. This period, which may last for days, weeks, months, or years, is characterized by freedom from symptoms and by normal physical findings including normal blood pressure, but by an abnormal urinary sediment. Addis(7) has stated that erythrocytes are found in the urinary sediment constantly during this stage, if careful microscopic examinations are made on fresh urines. The finding of blood casts in the urine during this stage is pathognomonic of glomerulonephritis. The less diagnostic hyaline and epithelial casts may also be seen, infrequently. Proteinuria is usually found, the amount varying between 0.10 gram and 0.5 gram per 24 hours.

The eventual outcome from the latent stage is :(a) progression to healing, (b) to the degenerative phase, or (c) to the terminal stage.

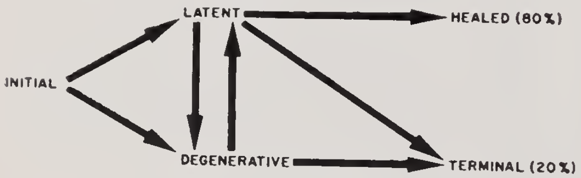

Figure 3. Course of glomerulonephritis. Modified from Addis(7).

Degenerative (Nephrotic) Stage — This stage of the disease is characterized by the cardinal features shown in Table I. Edema is the most important sign in this stage of nephritis. The main features are the paucity of findings and the marked derangements by laboratory studies. Characteristically, there is marked albuminuria, ranging from 5 to 20 grams a day with an average of 15 grams per day. The specific gravity of the urine is usually normal. Epithelial casts and granular casts containing some fatty elements are found in the urinary sediment in the early stages and, later, the characteristic oval fat bodies and fatty casts are pathognomonic of this stage of nephritis.

TABLE I. CLINICAL AND LABORATORY FEATURES OF EACH STAGE OF NEPHRITIS

	Acute (Initial)	Nephrotic (Degenerative)	Chronic (Terminal)
1. Clinical	A. Hematuria B. Hypertension C. Edema D. Cardiac failure E. Fever	Edema Normal B.P.	A. Hypertension
2. Laboratory	A. Urine 1. —RBC 2. —Casts blood epithelial 3. —albumin 〉 2 gm.	A. Urine 1. Oval fat bodies 2. Fatty casts 3. Albumin 5-20 gm.	A. Urine 1. Broad casts 2. Albumin
	B. B. U. N. ↑	B. B. U. N. normal	B. B. U. N. ↑
	C. Low grade anemia	C. No anemia	C. Anemia
		D. Hypercholesterolemia	
		E. Hypoalbuminemia	

The cause of the almost invariable hypercholesteremia and hyperlipemia is unknown. The nephrotic syndrome is characterized by an increase in the concentration of the alpha and beta globulins in which fraction most of the cholesterol is carried. It has been suggested(37) therefore, that the increased plasma cholesterol and lipid levels in these patients are the result of an increased lipid carrying capacity by the globulin fractions of the plasma. Byers, Friedman and Rosenman(37), have demonstrated that the plasma of these patients contains an excess cholate level, which, they feel, is responsible for the slower rate of destruction of cholesterol. They have postulated that there is an increasing tendency of the plasma to absorb and to retain cholate as a result of the increased alpha and beta globulins.

Alterations of the plasma proteins included a decrease of the total protein level, with a reduction of the albumin and gamma globulin fractions and an increase in the alpha and beta globulin fractions(38). Hypoproteinemia, and particularly hypoalbuminemia, is the principle cause of the marked edema occurring in the nephrotic state.

The relationship of the low basal metabolic rate, seen in this disease, to thyroid gland function is unanswered. Studies showing a failure of response to thyroid extract and, more recently, a normal uptake of radioactive iodine by the thyroid gland(39), seemingly absolve this gland as a cause of these derangements. On the other hand, it has been demonstrated that the concentration of the protein bound iodine in the serum is reduced and that an increased loss of protein bound iodine occurs in the urine of these patients(39). The significance of these observations is not completely clear.

Terminal Stage — Twenty per cent of patients with acute glomerulonephritis progress to the terminal stage. This plight is reached, either by a direct transition from the initial stage or, by passing through the latent, or, the degenerative phase. The first evidences of transition to this stage are, a gradual increase of diastolic pressure, progressive anemia, or gradually increasing blood urea nitrogen and creatinine levels(7). Edema, so characteristic of the degenerative stage, usually disappears when the terminal stage is reached. Approximately 5 grams protein is excreted in the urine in 24 hours. The microscopic examination of the urinary sediment reveals the extent of kidney damage. Broad (renal failure) casts are characteristic and, whenever these elements are numerous, there is almost invariably an elevated N.P.N.

Recently Muirhead et. al.(40) have stressed the hemolytic nature of the anemia which accompanies renal insufficiency. The type of anemia produced is normochromic and normocytic, usually paralleling the azotemia. While in the past the anemia has been considered to be due to hypoplasia or aplasia of the bone marrow, Callen and Limarzi(41) have shown that eighty per cent of the patients have a normal or hyperplastic bone marrow. Although this "marrow-response" would conform to Muirhead's hemolytic theory, other explanations have been advanced(42), such as toxic inhibitory effects on the bone marrow, protein deficiency, or secondary infections.

Treatment — The treatment of patients with glomerulonephritis includes the proper use of bed rest, diet, and fluids. Prolonged bed rest has been advocated(30, 43) for the initial stage of the disease. When evidence of quiescence of the disease becomes apparent as manifested by normal sedimentation rate, and diminution of cellular elements in the urine, an increase in physical activities commensurate with the amount of improvement may be permitted. Addis(7) has recommended that bed rest be maintained until the protein excretion is less than 0.2 of a gram in a twenty-four hour period and the blood pressure and blood urea levels are normal.

The most controversial aspect of the management of patients with acute nephritis has been the protein content of the diet. The proponents of a high protein intake(30, 44-46) have supported their contention by the claims, that a diet of this sort is either distinctly beneficial to patients with the disease, or at least not deleterious. Addis(7) and others(43), however, have stated that a high protein diet causes adverse effects in patients under treatment for nephritis. Smadel and Farr(47) have shown that rats with the "Masugi type of nephritis" improved or recovered when given a low protein diet but died of uremia when given a high protein diet. The present consensus of opinion based on the available experimental and clinical data supports the use of a low protein diet in the treatment of glomerulonephritis. Addis(7) recommends 0.5 gram per kilogram of body weight daily, and suggests cereal and milk proteins instead of animal proteins. If the loss of protein in the urine is considerable, it is recommended that this ration be supplemented by an additional quantity, equal to the amount lost in the urine. Fluid intake during this period is not restricted. Cardiac failure, when present in nephritis, should be treated by digitalization, and restriction of sodium intake.

When the nephrotic stage develops, rigid restriction of sodium intake is important. Protein intake should be maintained at 0.5 gram per kilogram of body weight. Since, however, there is a large amount of protein lost in the urine, supplemental protein should be supplied in an amount estimated by computing that lost within 24 hours. Corticotropin and cortisone (48-50) have apparently been of value in this stage of the disease.

Even in the latent stage of nephritis, Addis(7) recommends protein restriction with a suggestion, however, of a slightly more liberal caloric intake. In the terminal stage of nephritis, a diet low in protein, again 0.5 gram per kilogram of body weight daily, is maintained. In this stage however, the fluid intake must be carefully regulated and electrolyte balance achieved, or corrected if deranged. Sodium restriction will be necessary if the edema of cardiac failure develops. Serious electrolyte depletion, however, may occur in these patients if vomiting develops. Anemia of a severe degree is best treated with transfusions of whole blood.

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Dr. Theodore E. Boyd of Scarsdale, N.Y., has been appointed assistant director of research for the National Foundation for Infantile Paralysis, it was announced by Basil O'Connor, president of the March of Dimes organization.

Dr. Boyd has been a member of the research department of the National Foundation since 1947 and formerly served as chairman of the research department of the Loyola University School of Medicine in Chicago.

His appointment comes as the National Foundation is developing plans for massive nationwide testing of a trial polio vaccine. During his association with the National Foundation over the past six years, Dr. Boyd has helped guide the complex network of research projects financed by the March of Dimes which have resulted in the contemplated field trials.

Now, working with Dr. Henry W. Kumm, director of research, Dr. Boyd will assist in the coordination of the National Foundation's newest attack on poliomyelitis, prevention of the disease.

Dr. Boyd, who attended the University of Tennessee and Peabody College in Nashville, received his Ph.D. from th University of Chicago in 1923.

During World War I he served overseas as an aviator with the AEF, was wounded in action and received the Distinguished Service Cross and Silver Star. Previously he had taught in the public schools at Carthage, Tenn.

A native Tennessean, Dr. Boyd is married and the father of three children.

LEVOPHED CALLED LIFE-SAVING IN ACUTE MENINGOCOCCEMIA

Continuous infusion of the pressor agent Levophed to maintain a normal blood pressure level in a 17-year-old patient stricken with acute meningococcemia accompanied by shock was "probably life-saving and prevented irreversible shock and serious renal damage from prolonged blood deficiency," it is reported in The New England Journal of Medicine, 249:229, Aug., 1953.

Preventive Care of Infants and Children

IV. Influence of "Guided Growth" on Feeding and Sleeping Pattern of Infants — Clinical Applications —

CHARLES A. TOMPKINS, M.D.; BYRON B. OBERST, M.D.
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These authors present phase to phase detailed instructions in the recognition and interpretation of cues furnished by the infant or child himself, which, if followed by the doctor and parents will lead to "Guided Growth". Their interpretation of guided growth is the development of such a pattern of eating, sleeping, playing as will result in the evolution of a healthy, happy child who is emotionally and intellectually well adapted to family and society.

EDITOR

INTRODUCTION

From the two preceding papers(1, 2) evidence has been presented of certain physiological and psychological functions which must be interrelated if proper feeding in its broadest aspect is to be accomplished. Previous methods of feeding have not always satisfied these requirements. An explanation of the clinical application of "Guided Growth" is given. Inherent, uniquely individual mechanisms with certain cues that are self-evident and subject to interpretation for clinical application in meeting the basic needs of the infant are presented.

PREMISE

Basic physiological and psychological functions can be applied clinically to properly adjust the feeding and sleeping patterns of infants. "Guided Growth" results from the clinical application of these basic functions.

GUIDED GROWTH

By observing the infant's cry to determine the hunger-satiety sequence, a definite pattern of events will be established if the following factors are utilized:

1. The infant is neither too warm, too cold, or wet. Any of these factors may awaken the infant independently of hunger. Excessive warmth is the most common of these factors(2).

2. Feeding Time. If the clinician is to be allowed to determine the infant's inherent pattern on the basis of the previously explained physiological criteria, then it is not only psychologically right but necessary that the baby be fed soon after he expresses his desire to eat; however, the infant should not be fed until hunger is indicated. The holes in the nipples should be large enough to assure a complete feeding before the suck-reflex is exhausted. Also, the baby should be fed in the upright position and all he willingly will take.

In short, the basic function allowing the establishment and self-indication of an infant's schedule is the assurance that there is complete filling of the stomach. A self-indicated playing, eating, and sleeping sequence will result(1).

In a sense, self-demand, or perhaps more properly designated "self determined" schedules are not possible, per se, by the infant. More precisely, if the necessary functions are understood, the baby can "self-indicate" his basic waking, feeding, and sleeping intervals. The physician or the parents then determines whether or not his basic intervals, i.e., his reality-based wishes and needs, are to be given dignity.

Play Time: The importance of the relationship between play-time, feeding time, and sleeping time should not be overlooked(3). Parents should follow the plan of playing with the young infant, if he desires to play, before feeding him. The infant, when play-time is over and before he is too tired, then should be filled to capacity. Now, two needs are sequentially satisfied—the desire to eat and the desire to sleep. These needs, in this manner, are synchronized physiologically and psychologically. Early in life, play-time is contented wakefulness.

The baby should not be played with after being fed. He has been physiologically prepared for sleep if the stomach is completely full(1, 2). Excessive stimuli administered by vigorous and constant handling of the infant can overcome this physiological induction of sleep. Furthermore, by playing with the infant after the evening meal, undesirable habits can be established. He may desire to remain awake and to associate with the other members of the family until all of the household retires for the night. By continued repetition of this situation, the infant tends to reverse day and night eating and sleeping routines by sleeping most of the day and being wakeful at night.

Sleeping Time: The infant should be placed in his bed immediately after eating and with a minimum of handling.

If the infant is fed too often, he will not always go to sleep after feeding, because of a small intake. With proper synchronization of eating and sleeping, naps are dropped out simultaneously with feedings. When these basic criteria are satisfied, the infant reveals his own schedule, which will be maintained with regularity if the parents are properly guided. The physician's function is to interpret the language of the baby to its parents. The schedule and its subsequent indicated changes may be understood by the interpretation of the cues which the infant reveals to the physician.

TABLE I

Phase	Present Status of Schedule	Cues Indicated	Guidance Indicated
I.	6 a.m.-9-12-3-6-10-2 a.m. This phase usually absent in full term.	Asleep at feeding time or awake not hungry.	Change towards a 4-hour schedule.
II.	6 a.m.-10-2-6-10-2 a.m.	Asleep at 10 p.m. and/or 6 a.m. or if awake not hungry.	Let feedings go by as far as baby desires accumulating the gains during the day allowing a delay in 10 p.m.* feeding.
IIIa.	6 a.m. minus-10-2-6-10 a.m. plus (4:30-5:30 a.m.) (10:30-11:30 p.m.)	Awake and hungry before 6 a.m.	Orange juice or water before 10 a.m. bath.
IIIb.	6 a.m.-10-2-6-10 a.m. plus (11:00-11:30 p.m.)	Sleeps through to 6 a.m. but not past.	Omit orange juice or water before 10 a.m. bath.
IIIc.	6 a.m. plus 10-2-6-10 plus (6:30-7:30 a.m.) (10:30-11:30 p.m.)	Sleeping past 6 a.m. as well as past 10 p.m.	Split 6 p.m. feeding.†
IVa.	6 a.m. minus 10-2-split 6:00 p.m.† (4:30-5:30 a.m.)	Awaken before 6 a.m. with 6 p.m. already split.	Orange juice or water before 10 a.m. cares and split 6 p.m.
IVb.	6 a.m.-10-2-split 6:00 p.m.†	Sleeps through to 6 a.m. but not past with 6 p.m. split	Omit orange juice before 10 a.m. cares. Continue split 6 p.m.
IVc.	6 a.m. plus 10-2-split 6:00 p.m.†	Not hungry though awake at 6 a.m. or sleeps past 6 a.m.	Put on three meals with split 6 p.m.† or discontinue split 6 p.m.
V.	(7-9 a.m.) - (11-1 p.m.) (split 6 p.m.)†	Not hungry within 4 hours or difficulty in falling to sleep after meals.	Change to straight 3 meals schedule or delay breakfast and combine with lunch between 10 a.m. and noon with split 6.†
VI.	Three meals per day or (10 a.m.-12 noon) combination breakfast and lunch with split 6 p.m.	It will be noted that most of the cues are picked up by inquiring of the mother regarding the time of the first and last feedings of the day.	

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*—This 10 p.m. gain actually represents the sum total of the gains on all feedings. In other words, the basic interval has become longer than 4 hours.

†—Split 6 p.m. feeding means giving part of the contents of the meal before 6 p.m. and the remainder at bedtime. In other words a fraction of a feeding is given after the afternoon nap. The fraction results from feeding upon awakening rather than waiting for the baby to indicate hunger.

The infant is a constantly growing individual whose patterns are roughly constant from day to day; however, as the infant grows, gradual transitions will be made from one phase of the schedule to another. The physician must instruct the person in charge of the feeding early enough so that these transitions can be recognized, and the proper changes in the schedule made smoothly. The changes are made in the light of the baby's basic needs and indicated cues.

Table I presents a brief summary of the schedule, the cues to be observed and necessary changes to be made. A detailed explanation will follow. Chronological age or weight ceases to be a major factor in guidance and schedule changes. Physiological age is now the determining factor.

The schedule is further affected by such factors as too dilute formulas and insufficient solid foods. If an infant takes more than thirty ounces of formula, generally the formula is either too dilute or the infant is not receiving enough solid foods.

If the infant goes on a four-hour-sleeping interval on several occasions, he will do so consistently unless a variable is introduced. An infant who has once established a given interval, then wakes up early and is hungry, either has not been filled to capacity at the previous feeding, is overdressed with resultant sweating and thirst, or has need for a more concentrated formula.

DETAILED EXPLANATION AND APPLICATION

To explain the clinical application of cues, we start a theoretical infant with a three-hour-feeding pattern. This pattern is the one frequently seen when the infant goes home from the hospital. There is also a period of irregularity due to lack of filling at each feeding, which may last for seven to fourteen days, when the infant is first at home. This incomplete filling may occur early in life even though the feeding technic is correct. Since the infant feels pain so poorly, lacks vigor for nursing, and is so impelled to sleep, he is apt to fall back to sleep before completely filling his stomach. Giving part of a feeding then withholding food a short time until he cries again may assure a more complete filling. The parents should be advised to anticipate these early irregularities.

PHASE I

6:00 a.m.-9-12-3-6-10-2:00 a.m. This phase actually is not as precise as here indicated. The night interval could not be expected to vary much from the daytime interval except that the baby is more likely to be allowed to really express hunger before the parents awake. Very few full term newborns will need to be fed every three hours. Whatever the initial interval, it will soon stretch to four hours or more if the infant is fed properly.

PHASE II

The first schedule change will be indicated by the infant's being asleep at the feeding time or, if awake, not hungry. He should be allowed to shift towards a four-hour schedule by delaying feedings until hunger is indicated. The schedule will soon approximate: 6:00 a.m., 10:00 a.m., 2:00 p.m., 6:00 p.m., 10:00 p.m., and 2:00 a.m.

PHASE III

The next schedule change will be indicated by the infant's sleeping past 10:00 p.m. to 11:00 or 11:30 p.m., or past 6:00 a.m. Each feeding interval is lengthened a little, which is cumulative. This results in the baby's going to bed around 11:00 p.m. if the first feeding of the day approximated 6:00 a.m. Six a.m., 10:00 a.m., 2:00 p.m., 6:00 p.m., 10:00 p.m. plus (11:00-11:30 p.m.). The reasons why the night-sleeping interval is prolonged in the beginning are little understood. Some of the reasons are, decreased stimuli at night because of the quietness, darkness, and decreased handling and activity. The person in charge of the feeding is instructed to let all feedings go by as far as possible until the infant starts fussing.

Six a.m., 10:00 a.m., 2:00 p.m., 6:00 p.m., 10:00 p.m. plus (11:00-11:30 p.m.).

If the infant is fed to capacity at 11:00 or 11:30 p.m., he will automatically sleep past the 2:00 a.m. feeding, to near 5:00 a.m. At around 4:00 or 5:00 a.m., he is fed to capacity and left to sleep his regular interval. The infant will wake near 9:00 a.m. At this point, a variable is introduced purposely into the feeding schedule. The aim of this variable is to appease the infant's hunger for a short time. As soon as the infant awakens, he is given all the orange juice, tomato juice, prune juice, water, or milk-flavored water he will take. This material should be given soon after the infant awakens and before he cries. Unless this is done, he may not be satisfied and will demand a regular feeding. Now, the morning bath is given, and the 10:00 a.m. feeding is near. The feeding should not be given, however, until the water or juice is emptied from the stomach as evidenced by hunger. If the feeding is given too soon, it is diluted by the water and the following interval may be shortened. The infant is back on schedule for the rest of the day. The schedule has roughly this appearance:

a.

6:00 a.m. minus (4:30-5:30 a.m.)	9:00 a.m.	10:00 a.m.	2:00 p.m.	6:00 p.m.
Milk	OJ-Bath	Milk	Milk	Milk

10:00 p.m. plus (11:00-11:30 p.m.)
Milk

This phase is often by-passed going directly to b.

b.

In a few days, the infant will sleep past 5:00 a.m. to 6:00 a.m. The orange juice or water then may be omitted before the morning bath.

6:00 a.m.	10:00 a.m.	2:00 p.m.	6:00 p.m.	10:00 p.m. plus (11:00-11:30 p.m.)
Milk	Milk	Milk	Milk	Milk

As the infant grows and develops, he obtains muscular control of his tongue. At this point, he makes chewing motions on his fist or on the nipple. He is now able to carry food back with his tongue instead of uncontrollably thrusting it out. At this point the infant is ready to eat pureed foods regardless of his chronological age. These foods may be given in any quantity desired by the infant, but should not be forced. Forcing teaches the child to dislike the forced food because of related unpleasant emotional experience. A small, narrow, shallow-basined spoon may be used for the feeding, and the pureed food placed near the middle of the tongue so that swallowing is easier. Cereal and applesauce are usually, but not necessarily, added to the diet first. These foods are of a bland nature and help the infant make an easy transition from liquids to soft foods. Other foods of a similar consistency may be offered. For convenience, these foods are offered at the feedings that approximate 10:00 a.m., 2:00 p.m. and 6:00 p.m.

6:00 a.m.	10:00 a.m.	2:00 p.m.	6:00 p.m.	10:00 p.m. plus
Milk	Pureed Food Milk	Pureed Food Milk	Pureed Food Milk	Milk

The next change in the schedule is indicated by the infant's sleeping from the 10:00

p.m. plus feeding (11:00-11:30 p.m.) to past 6:00 a.m. (6:30-7:30 a.m.). In order to keep the day stabilized and to help the infant conform to his own patterns, another variable is introduced into the schedule:

PHASE IV

The infant seldom remains satisfied if a complete feeding is dropped. The split 6:00 p.m. feeding aids in dropping the 10:00 p.m. feeding. The split 6:00 p.m. feeding consists of purposely appeasing the infant's appetite with part of the 6:00 p.m. feeding as soon as he wakes from his 2:00 p.m. sleeping interval. At this point (4:30-5:30 p.m.) the baby is given all of the solids he wants plus all the orange juice, tomato juice, milk or milk-flavored water he will take.

Though the infant is fed until satisfied, this food may not cause the infant to become sleepy because he has just awakened. By this age, he will normally be remaining awake for a time before feedings. This period of staying awake is in contrast to the newborn period when sleep was continuous except when interrupted by hunger contractions or by some other disturbance. If so, he usually is sleepy for only a short time. The fact that the infant has had an early partial feeding permits the family to enjoy the evening meal undisturbed while the infant looks on. Later on in growth, this period sets the stage for the convenient introduction of table foods. Because the infant is satisfied but not sleepy, a long play-time with the parents or a period of contented wakefulness is permitted, without interrupting the feeding-sleeping sequence. At the conclusion of the play-time, the infant is both hungry and sleepy. He now is fed all the milk he will take and is put to bed. This milk is the remaining portion of what would have been the 6:00 p.m. feeding—the feeding automatically split because a portion was given upon awakening rather than waiting for the baby to indicate hunger. Another device having the effect of splittting a feeding is to give a diluted feeding. Following the split feeding the infant usually will sleep all night. For a while he may awaken early, 5:00 a.m. or so. If he does awaken early, the baby is fed his milk at this time and brought back onto schedule at 10:00 a.m. by giving orange juice or its equivalent before the morning bath, as previously explained. In this manner, naps are dropped out simultaneously with feedings as the infant himself indicates.

a.

6:00 a.m. plus (4:30-5:30 a.m.) Milk	10:00 a.m. Cereal Fruit Milk	2:00 p.m. Vegetable Milk	split 6:00 p.m.		
			↓ 4:30 p.m. Fruit Vegetable Orange Juice or Water	PLAY TIME	↓ 8:30 p.m. Milk

The first part of the split 6:00 p.m. feeding is the only point during the daytime routine that the baby is fed upon awakening and before hunger is indicated. Since he is not really hungry, the partaking of food has primarily the meaning of social intercourse. The feeding should be offered casually without coercion. The pleasure derived will be social rather than the satisfaction of hunger. This feeding is a pschological help to both the infant and the rest of the family. The infant usually is a socially-minded individual by this time. The split feeding helps him become socially integrated with all of the family, especially with the father who may have no other opportunity to play with the baby. This integration is accomplished without the development of poor habits of eating and sleeping. The schedule purposely appeases the infant's appetite and allows a period for playing or for contented wakefulness when he can be played with before the evening bottle rather than afterwards. Playing with the infant after feeding, as previously discussed(1, 3), is not in accord with the infant's physiological mechanisms. The distortion of these physiological functions may result in the infant's wanting to stay awake until the adults retire. If the feeding-sleeping sequence is always maintained, we are simultaneously meeting the needs on both a physiological and an emotional basis. The mother has cared for the baby all day. She welcomes an opportunity for the husband to care for the infant without interrupting the feeding and sleeping habits. The split 6:00 p.m. feeding also is helpful in the hot summer weather because the infant is prone to be thirsty during the late afternoon just about the time the fluids from the first part of the split 6:00 p.m. feeding are indicated. If this feeding were not split, the fluids would alter the usual schedule.

PHASE V

The next change indicated in the feeding schedule occurs when the infant sleeps to 7:00 a.m. or 8:00 a.m. from around 8:30

p.m. the evening before, the 6:00 p.m. feeding having been split. The infant is now ready for three meals a day with a split 6:00 feeding regardless of his chronological age. At this point it is very important to let the infant be awake and play for a while after his sleeping interval. He should not be fed until he indicates hunger. In this manner, he will be both tired and hungry at the same time. The bed, the food, and thus the parent are all pleasurable to the infant. This correlation is basic to the child's feeling loved. The feeling of being loved comes initially through meeting physiological needs. If the infant is fed at this time, he will go to sleep following each feeding and take an early morning and an early afternoon nap. He will be awake for a while in the evening and then will sleep all night.

But if the infant is fed soon after he wakes, food will not be an inducement for sleep. At this age he stays awake and plays for longer periods. Such an infant may take a late morning and late afternoon nap, and wish to stay awake most of the evening. This situation can be avoided if he is allowed to stay awake until sleepy and hungry before being fed.

Breakfast 7:00-9:00 a.m.	Lunch 11:00 a.m.-1:00 p.m.		Supper split 6:00 p.m.	
Pureed Food Milk	Pureed Food Milk	↓		↓
		4:00-5:30 p.m.	PLAY TIME	7:00-8:30 p.m.
		Pureed Food O.J. or Water		Milk

If for some reason the split 6:00 p.m. feeding is not desirable, there is the alternative of discontinuing the split feeding. This change establishes three or four straight feedings per day at intervals of four or more hours.

PHASE VI

When the infant is not hungry within four hours and a fraction, takes a series of short naps, or has difficulty falling asleep after eating, the schedule is changed to three meals a day by allowing the 10:00 a.m. and 2:00 p.m. feedings to fuse between 11:00 a.m. and 1:00 p.m.

7:00-9:00 a.m.	11:00-1:00 p.m.	5:00-7:00 p.m.
Solids Milk	Solids Milk	Solids Milk

An alternative is to meet the child's fluid requirements in the morning with orange juice or water, allowing the child to indicate hunger, and to take a combination breakfast and lunch between 10:00 a.m. and 12:00 noon. This also combines the morning and afternoon nap putting it in the early afternoon following the combination meal. The evening meal is then spit as described above. Later the child may require only the two meals without splitting the evening meal. This alternative is helpful in solving some of the sleeping problems of this period, as well as the feeding problems.

The feeding and sleeping patterns of the infants can be roughly divided into six phases. The typical cues given with each phase show, when the infant indicates them, that he is now ready to move into the next phase. These phases have been summarized in Table I.

If, for any reason, the infant should go off schedule, he can be guided back by filling him to capacity when he indicates that he is hungry. The fact that the infant is fed when completely empty and when indicating hunger permits him to fill to capacaity, to become satisfied, and to go back on his own established interval within several feedings.

The infant will maintain this pattern throughout the rest of the day unless a variable is introduced. At this point, the 10:00 p.m. feeding is allowed to go by as far as possible without the infant's crying. This step helps the infant sleep past the 2:00 a.m. feeding and he awakes early in the morning. He may awaken before the 6:00 a.m. feeding, at 4:30-5:30 a.m. He is fed to capacity and allowed to sleep his regular interval, which is about four hours or more, depending upon his capacity. Soon after awakening, he is given all the orange juice or water he will take to temporarily satisfy his appetite. The morning cares are performed, and the 10:00 a.m. feeding time is near. In this manner, the infant is brought back onto his schedule. If the infant is made to cry out the time interval to the next feeding time, the sequence of air and fatigue previously explained(3) usually follows. The time gained in this case is again lost when the infant desires food early because of a previously inadequate filling of the stomach.

The present method of infant feeding has been used by the senior author of this paper in his private practice for the past twelve years, and in his service at the University of Nebraska Well Baby Dispensary for the past six years. A large variation in responses and patterns is apparent. Within three months time most infants are eating three meals a day, with or without a split

6:00 p.m. feeding. Some of our infants have followed this pattern as early as five weeks of age; others, as late as six months. The important thing is that each infant's individual needs have been met; his own self-indicated schedule has been used.

COMMENT

The two papers immediately preceding this one emphasized the importance of building feeding and sleeping schedules on interrelated physiological and psychological functions. For this interrelationship to be accomplished, the person in charge of feeding the infant must have common sense, be interested, and be able to follow and interpret the instructions given by the physician in charge. The physician must be able to interpret cues, and thereby he can intelligently suggest guidance for the infant.

Though this type of feeding is important in the "short view," this whole philosophy is even more important in the "long view." The basic concept of "Guided Growth" outlines a total approach to the infant, the child, and the adolescent, which should be maintained throughout life. Of necessity, it should begin with and apply to the normal, mature, full-term baby. Premature births, birth injuries, metabolic disorders, and other complicating factors will tend to modify the "short view" of "Guided Growth" and its actual application. Weight, age, and calories-per-ounce of feeding are important in all feeding regimes, but these factors should not constitute the only basic foundation for guiding the child's growth. The child's individualism, spontaneity, and capabilties also should be determining forces. In "Guided Growth," age and weight are not used primarily as criteria for determining what, how much, and when an infant is to be fed. However, in the background, all of these factors are considered and utilized.

None of the previous methods of handling infants, in our opinion, are capable of actually guiding growth, nor do they uniformly meet an infant's basic needs. The rigid, fixed schedules attempt to develop a pattern of conformity to certain set, preconceived patterns, but individualism is slighted. The free-wheeling schools of thought, self-demand schedules, and self-regulatory schedules all imply that the infant can do more than he is capable of accomplishing and asks too little of the parents in terms of how to meet basic needs and how to know what these needs are. Feeding the infant on demand, without regard to feeding technic or to the physiology of sleep, does not necessarily meet all of the infant's needs in relation to eating and sleeping. As previously pointed out, a more precise understanding is better connoted by the term of self-indicated rather than self-demand schedule. Indeed, non-physiological feeding may seriously impair sleeping patterns as will be shown in a forthcoming paper. If his needs are met in the ultimate, he will not continue to be a demanding individual. This guided regime attempts to let individualism as well as conformity develop on the basis of the needs of the family without ignoring the infant's reality-based needs. With this philosophy of "Guided Growth," an emotionally secure child emerges, who conforms comfortably to certain reality-based patterns, and who spontaneously unfolds more optimumly according to his own abilities.

Into this philosophy of thought, the contributions from religion, education, sociology, general medicine, pediatrics, psychiatry, and psychoanalysis can be interwoven to approach a more optimum intellectual, emotional and physical growth of the child.

SUMMARY

1. Basic physiological and psychological functions must be interrelated to produce sound feeding and sleeping patterns in infants.

2. There is, basically, an inherent and individually peculiar pattern for playing, contented wakefulness, feeding, and sleeping which is subject to interpretation.

3. These basic functions can be interpreted by the physician through certain cues or types of behavior in the infant, and then clinically applied. This clinical application assures the interrelation of these basic physiological and psychological functions.

4. There is a set of cues, which serves as the infant's language, to indicate changes in the feeding and sleeping patterns. The initial cue indicated a three or four hour schedule by whether or not the infant sleeps three or four hours. Subsequent cues indicate the use of purposely introduced variables including (1) low caloric fluids (such as orange juice) to buffer the infant back on schedule by 10:00 a.m. if he has awakened and become hungry, thereby starting the day at a

pivot point earlier than 6:00 a.m.; or (2) splitting the 6:00 p.m. feeding to allow the infant's needs for the last feeding to come earlier at night so that the first morning feeding is not grossly by-passed.

5. A theoretical case shows the clinical application of these cues.

6. The basic philosophy in this regime of infant care may be carried throughout life and may freely use contributions from all related fields.

7. "Guided Growth" produces an emotionally secure child who conforms to his own basic patterns indicated by his own physiological and psychological needs. He thus spontaneously unfolds according to his basic potential for physical and emotional growth, and consistent with his own timetable.

8. Complete emotional, intellectual, and physical growth must be "guided" on the basis of conforming an infant's inherent needs to reality. To assure this conformity, the oncoming generations are dependent on enlightened parents, teachers, and physicians who can interpret the infant's needs in the light of reality. This assistance helps the infant and child adapt his needs to the reality of the moral and physical universe.

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The Roentgen Diagnosis of Peptic Ulcer*

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After brief consideration of the definition, the pathologic variations, and the locale of occurrence of peptic ulcers, Dotor Garland dwells at some length on radiologic diagnosis of the condition. He stresses the method of examination and discusses the validity of radiologic conclusions. He recites the various qualifying statements the radiologist may be justified in using to record his diagnosis, thus indiretly expressing his confidence in the x-ray study.

EDITOR

Peptic or "acid" ulcer may occur in the esophagus, stomach and small intestine (notably in the first portion of the duodenum). Occassionally it is seen elsewhere in the small bowel in the second portion of the duodenum; in areas where ectopic gastric mucosa is found (e.g. a Meckel's diverticulum); and in portions of bowel involved in gastro-enteric fistulae (jejunum and colon). However, the vast majority of cases involves the duodenum and stomach, notably the duodenal bulb.

Petic ulcers may be acute or chronic. Clinically most cases, when seen, are subacute or chronic. Palmer and others define AN ULCER as a "lesion which involves not only the mocosa but also the muscularis mucosae;" whereas AN EROSION is a lesion which involves only the mucosa. The distinction is important, especially if one attempts to correlate clinical or gastroscopic findings with radiclogical ones, and the arbitrary definition is probably justified.

Pathologically, the majority of ulcers are found to be single. However, multiple ulcers may occur in both stomach and duodenum, or in one of those organs. Active and healed ulcers may coexist. Duodenal ulcers are usually from 2 to 10 mm. in diameter and from 2 to 6 mm. in depth, but may reach considerable size (e.g. 30 mm. diameter). Gastric ulcers are often 5 to 25 mm. in diameter, and from 2 to 10 mm. in depth when recognized, but can vary widely (e.g. 60 mm. diameter and 20 mm. depth).

The essential difference between acute and chronic ulcer is the amount of connective tissue present. The border of the ulcer may be normal or inflamed, flat or rounded (the latter usually due to submucosal edema). The liver or pancreas forms the floor of many chronic gastric ulcers. Healed ulcers show first a thin layer of normal mucosal cells across the defect and ultimately restoration of normal mucosa. Deep and large ulcers, especially in the duodenum, tend to leave persistent deformity (puckering or dimpling); small or shallow ulcers may heal without deformity.

METHOD

In no branch of roentgenology is METHOD as important and fruitful as in the roentgen examination of the upper alimentary tract. Fluoroscopy is essential: It permits study of the size, shape, motility, and mobility of various organs, with manual palpation of accessible regions. It must be supplemented by films (especially in apparently negative cases) lest smaller ulcers and polypoid lesions be overlooked. Spot films are always a useful adjunct, especially for esophageal and bulbar lesions.

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The best standard medium is barium sulphate 4 oz. (by weight) in water 8 oz. (by volume). A single swallow (1 ounce) permits mucosal relief studies in most cases; the remainder permits examination of the filled viscus, with study of peristalsis, etc. Films may be made without or with special compression according to the nature of the problem involved. Films should be made in standard as well as special positions, whenever possible. Standard positions permit valid comparison between different sets of films. Gastric air may be used for double contrast examination by suitable positioning of the patient.

DIAGNOSIS

The diagnosis of peptic ulcer is made from (a) the clinical history, (b) the laboratory findings and, above all, (c) the roentgenologic or gastroscopic demonstration of the lesion. Of these, the most important diagnostic procedure is the roentgenologic.

The roentgenologic diagnosis is based on the demonstration of a crater, with or without radiating mucosal folds and incisura formation. Secondary, and relatively unimportant, signs of gastric ulcer are retention, altered peristalsis, and localized tenderness. Secondary signs of duodenal ulcer are persistent deformity, or spasm. The crater is the only definite x-ray evidence of an active ulcer. It is usually seen in profile in the stomach and "en face" in the duodenum, and can be shown in about 95 per cent of cases of active gastric ulcer, and 60 per cent of cases of active duodenal ulcer.

In gastric lesions, the crater may be obscured by overhanging, thickened mucosal folds or by the fact that it is filled with epithelial, hemorrhagic, or food debris. In duodenal lesions, the crater may be obscured by marginal edema, spasm, and overlapping gastric or duodenal shadows. Conversely, craters may be simulated in the stomach by a short segment of normal gastric wall spaced between peristaltic waves, and by pockets of barium lying in between gastric rugal folds. In the duodenum, craters may be simulated by incomplete filling of the duodenal bulb, or by overlapping "extrinsic" barium shadows. When the roentgenologic findings are at variance with the clinical, and are not absolutely diagnostic, the x-ray examination should be repeated.

What is the significance of bulbar deformity without niche? We believe that if the deformity is constant, and the patient has not had a previous upper abdominal operation, there is a 95 per cent probability that it is due to ulcer, or scarring from an ulcer. In cases of this type, can a positive statement be made on x-ray grounds alone, as to the presence or absence of an active ulcer? We believe that, in general, from a single examination, the answer is no. However, if there are no associated findings such as pylorospasm, altered peristalsis or marked local tenderness, and if the deformity remains unchanged over two or three examinations, the chances are that the finding is due to scarring ("healed ulcer"). Conversely, if those associated findings are present and the deformity is variable, it is probably due to active ulcer.

Can healing of an ulcer be reliably diagnosed by x-ray examination? In the case of most gastric lesions, the answer is yes. In the case of about two-thirds of duodenal lesions, we believe the answer is no. Criteria for such diagnosis include disappearance of a previously demonstrable niche, and in fairly recent lesions, disappearance of deformity. Chronic ulcers (over 2 years) or large duodenal lesions tend to leave some persistent deformity. But recent or small lesions may heal without deformity. Many authorities have held that once a duodenal ulcer was present, the bulb will never be smooth again. However, we have seen many young men with normal appearing duodenal bulbs (by compression and routine technique), but who had unequivocal craters, from 2 to 5 mm. in diameter, a few months previously. Some of these men were under observation during the entire period of healing; some were seen only after x-ray examination; but they had excellent "spot" films showing clear-cut craters. Therefore, we believe that the old statement that healed duodenal ulcers "typically show some contraction" no longer holds.

RELIABILITY OF X-RAY DIAGNOSIS OF DUODENAL ULCER

We believe that the reliability of an unequivocal x-ray diagnosis of duodenal ulcer, in experienced hands, is about 95 per cent. The criteria for such diagnosis may be listed as follows:

(1) Niche (en face with corona, or in profile). This niche means active duodenal ulcer in at least 95 per cent of cases. In the remaining 5 per cent it may be produced by the dimple of a healed large crater, or by an unusual scar or adhesion.

(2) Deformed bulb, more or less constantly irregular, without niche, in a person who has not had previous operation on the duodenum. This means active or healed ulcer in about 95 per cent of cases. The distinction between active and healed ulcer may be very difficult or impossible on x-ray grounds alone, but is aided by serial examination and by attention to the indirect findings previously mentioned in this paper. Probably 75 per cent of cases in this group have active ulcers; about 20 per cent have healed or inactive ulcers; 5 per cent due to miscellaneous factors, including adhesions.

(3) Smooth bulb. A non-deformed bulb by routine and compression technique, using both fluoroscopy and radiography, means that no duodenal bulb ulcer is present in about 95 per cent of such cases. (Always check the postbulbar duodenum as well!)

(4) Deformed bulb, inconstant, and without niche. This is usually due to incomplete filling from pylorospasm, etc. Occasionally it is due to duodenitis, with or without shallow erosion.

(5) Healing may rarely be diagnosed with certainty on x-ray grounds alone. Disappearance of the niche and deformity is suggestive of healing especially when good comparable compression films are available. However, such disappearance may be due to partial healing, with a plug of granulation tissue in the crater, or may be due to filling of the crater with epithelial debris, mucus, etc. Large and deep duodenal ulcers may leave a persistent deformity even though healed; shallow ulcers may seem to become healed, only to be deeper than ever two weeks later. Non-recurrence of ulcer symptoms after four weeks of unrestricted diet is probably a better criterion of improvement than apparent disappearance of anatomic deformity! In summary, the reliability of the x-ray estimation of duodenal ulcer healing under average circumstances is probably only 50 per cent.

COMMENT

Many experienced radiologists believe that the diagnosis "duodenal ulcer" is as far as one should go in a roentgen report, even though they admit that they use the term to include old scarred (and presumably healed) ulcers, as well as definitely active ones. Since many clinicians believe that an x-ray report of duodenal ulcer means or implies active ulcer, we think that qualification of the phrase should be attempted. For example, in most cases reports could be summarized along one of the following lines:

1. Duodenal ulcer, with visible crater.
2. Duodenal ulcer, with questionable crater.
3. Duodenal ulcer, no crater visible, but deformity typical; presumably active.
4. Duodenal bulb deformity; probably scarring from healed ulcer.
5. Duodenal bulb deformity; probably surgical (closure of perforated ulcer or etc.).
6. Duodenal bulb deformity, probably extrinsic (no ulcer).
7. Negative.

We used this terminology in a review of 300 consecutive gastrointestinal cases studied (ambulatory white adults), and found the percentage distribution of findings to be as follows:

1. Duodenal ulcer, with visible crater 20 per cent.
2. Duodenal ulcer, with questionable crater 5 per cent.
3. Duodenal ulcer, no crater visible, but deformity typical; persumably active, 10 per cent. These cases showed one or more of the following changes: pylorospasm, local tenderness, gastric hypersecretion, or bulbar irritability.
4. Duodenal bulb deformity; probably scarring from healed ulcer 3 per cent.
5. Duodenal bulb deformity; probably surgical (closure of perforated ulcer or etc.) 1 per cent.
6. Duodenal bulb deformity, probably extrinsic (no ulcer) 0 per cent.
7. Negative 61 per cent.

It requires some effort on the part of the examiner to attempt the amplified summary in many cases, but we believe that the resultant report is much more informative to the clinician.

Some years ago we reviewed the findings relative to uncomplicated peptic ulcer in 1000 consecutive gastrointestinal examinations with these results:

Total number of cases	1000
Number with unequivocal x-ray findings of ulcer	321 (32%)
Gastric Ulcer	13
Duodenal Ulcer	308
(ratio 24 to 1)	
Duodenal Ulcer with definite crater	164
Duodenal Ulcer with probable crater	24
Duodenal Ulcer without visible crater	120

The cases were studied in a large naval hospital, and were mostly young males. Craters were demonstrable in 61 per cent of the duodenal ulcer cases and, of course, in all the gastric lesions. Lesions other than ulcers (such as polyp, carcinoma, anomaly, etc.) were also observed in the upper gastrointestinal tract of some of the cases, but are omitted as not pertinent to the present review.

It is known that the ratio of duodenal to gastric ulcers varies widely according to the nature of the cases under review. In private ambulatory practice, our ratio is about 15:1; in private hospital practice, about 10:1. Some autopsy data have shown it to be as low as 4:1. These figures are not contradictory.

SUMMARY

Criteria for the diagnosis of ulcer are outlined:

Some duodenal ulcer craters may heal without any persistent deformity (that can be shown by ordinary radiological technique). This fact is not new, but is not generally appreciated.

In an attempt to distinguish "active" from "healed" duodenal ulcers, it is suggested that, in x-ray reports, the phrase "duodenal ulcer" be modified whenever possible by a statement indicating the presence or absence or crater, or if no crater is seen, by noting the apparent stability of the deformity present.

REFERENCES

1. Garland, L. H.: Peptic Ulcer. Stanford Medical Bulletin, 3:114, 1945.

Tuberculosis Abstracts

VIABILITY OF TUBERCLE BACILLI IN VIVO WITH AND WITHOUT CHEMOTHERAPY

The fact is now clear that, despite the availability of several types of drugs highly effective against tubercle bacilli in vivo, it is very difficult, if not impossible, to eradicate infection from human patients, even by prolonged chemotherapy. In contrast is the other fact, long known to pathologists, that bacilli tend to disappear spontaneously without any form of therapy from certain types of lesions, in particular from cold abscesses and from closed caseous areas. This is well confirmed by the recent observation that it is at times difficult to recover living bacilli from resected lung lesions in patients who have received no chemotherapy. Instead of being contradictory, however, these two phenomena correspond in reality to two independent aspects of the pathogenesis of tuberculosis. In this connection some experimental findings bearing on this problem are presented.

The failure of drugs to kill all bacilli in infected tissues has been observed, not only in human tuberculosis, but also in many types of experimental infections. This may be illustrated by examples taken from studies in mouse tuberculosis.

Results obtained independently by Dr. McCune of the Department of Medicine of the New York Hospital, and in our own laboratory, may be condensed very briefly. Mice were infected intravenously with doses of culture containing approximately from one hundred to one million organisms. Several strains were used, some virulent, others attenuated. The animals were treated with either streptomycin or isoniazid, or simultaneously with both drugs, the therapy being started on the very first day of infection and continued thereafter. Some of the animals were sacrificed at weekly intervals during three months. Although no macroscopic evidence of tuberculous lesions could be recognized in any animal, living tubercle bacilli could be recovered from all of them, even when BCG was used and when therapy had been continued for 85 days. Moreover, bacillary invasion of the tissues began uniformly within a few days after discontinuance of the drugs. Several lines of experimentation have thrown light on the mechanism of this disturbing phenomenon.

First there must be recognized the all important fact that, despite early claims, it is practically impossible to sterilize cultures of tubercle bacilli in vitro by adding to them either streptomycin or isoniazid. True enough, most of the bacilli appear to die rapidly in contact with the drugs, but a few survive prolonged exposure to them. The phenomenon probably has its counterpart in vivo. It is probable, in other words, that a certain percentage of the bacilli in an infected individual survive exposure to the drugs, not because they have developed hereditary "drug resistance," but because they exist in a form different from that in which observations are usually made.

Another reason for the difficulties experienced in eradicating infection may be that in vivo a large percentage of the tubercle bacilli are present, not free in body fluids, but instead within phagocytic cells. Experiments in tissue cultures have revealed that the inhibitory power of streptomycin fails to manifest itself against the growth of bacilli which have been engulfed by monocytes — a fact which certainly contributes to the inability of this drug to eradicate infection.

This explanation, however, cannot serve in the case of isoniazid, for this drug is just as effective intracellularly as it is extracellularly, in tissue cultures at least. It must be assumed, therefore, either that the bacilli can be engulfed by cells which

(Continued on page 460)

President's Page

THE CURRENT PROBLEM

There are some very important problems facing medicine today. The high cost of malpractice insurance and the recent series of slanderous articles in lay journals has increased the possibility of malpractice suits in all branches of medicine. We have lost some friends.

The amount of money appropriated in Washington to infiltrate medical practice at all levels, including the voluntary health agencies which have been a great source of good to both the laymen and the physician without any state taxation, is alarming.

In order to accomplish these ends there is a definite effort being made to split the medical profession into opposing factions — those who think there is no danger, or desire socialism; and those who feel there is a danger, and are opposed to socialism. This is the old process of "Divide and Conquer." Unless we are united, we are sure to fall.

We should follow only those leaders whose records show they are opposed to socialism, and not those who claim to oppose socialism but whose records show a distinct opposite trend.

The plan for our United Health Fund Drive will be published in next month's Nebraska State Medical Journal; it will aid in separating the sheep from the goats. Those who are willing to follow the leadership of the medical profession will join the United Health Fund Drive.

JAMES F. KELLY, M.D.,
President,
Nebraska State Medical Assn.

CAT.

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Vol. 38 December No. 12

THE A.M.A. TWELVE POINT PROGRAM

1. Creation of a Federal Department of Health of Cabinet status with a Secretary who is a Doctor of Medicine.
2. Promotion of medical research through a National Science Foundation with grants to private institutions which have facilities and personnel sufficient to carry on qualified research.
3. Further development and wider coverage by voluntary hospital and medical care plans to meet the costs of illness, with extension as rapidly as possible into rural areas.
4. Establishment in each state of a medical care authority to receive and administer funds with proper representation of medical and consumer interest.
5. Encouragement of prompt development of diagnostic facilities, health centers and hospital services, locally originated, for rural and other areas.
6. Establishment of local public health units and services.
7. The development of a program of mental hygiene with aid to mental hygiene clinics in suitable areas.
8. Health education programs administered through suitable state and local health and medical agencies to inform the people of the available facilities and of their own responsibilities in health care.
9. Provision of facilities for care and rehabilitation of the aged and those with chronic disease and various other groups not covered by existing proposals.
10. Integration of veterans' medical care and hospital facilities with other medical care and hospital programs and with the maintenance of high standards of medical care.
11. Greater emphasis on the program of industrial medicine.
12. Adequate support with funds free from political control, domination and regulation of the medical, dental and nursing schools and other institutions necessary for the training of specialized personnel required in the provision and distribution of medical care.

Organization Section

SECRETARY'S LETTER—

The American Medical Association's policy regarding medical care for veterans with non-service-connected disabilities is a big issue on the medical front today, and Dick West, probably the most prominent news commentator in Texas, pulled no punches recently when he expressed his views on the problem.

Mr. West, who is on the editorial staff of the Dallas Morning News, supported the medical profession in a 15-minute broadcast over station WFFA. He said: "No doctor anywhere wants to deny free medical care to a war veteran who was injured in the service of his country, or who contracted illness later due to military service, such as tuberculosis or mental disorders . . .

"A veteran who wants his tooth pulled, or his tonsils taken out—seven years after he was discharged from the Army—ought to go ahead and have them attended to at his own expense, most of the nation's doctors feel. "It seems that veterans to get this free medical care, must sign an affidavit that they can't afford to pay for it themselves. Many of them sign such an affidavit, of course, but here's the rub: You can't investigate that affidavit. There actually have been cases of veterans who make $15,000.00 a year in civilian life, signing these affidavits so they can get free attention.

"The doctors — justly I think — feel that they (veterans) are just as able as the next man to pay for private medical care and that the facilities of the Veterans Administration ought to be devoted exclusively to those who definitely and probably contracted their illness as a result of military service."

AMA WASHINGTON LETTER—

The time has come to reverse the trend and use more state and less federal money in vocational rehabilitation work, in the opinion of Secretary Hobby. Addressing the National Rehabilitation Conference, the Secretary of Health, Education, and Welfare noted that in 1921, when the program started, the federal share was only one-third. (However, this was for only a part of a year). Federal contributions reached a peak of 73.5 per cent in 1947, and have declined to about two-thirds for the current fiscal year. Mrs. Hobby remarked that appropriations committees in Congres already have begun to "question the wisdom of providing such a proportion of federal funds for a program keyed to the principal of state operations. To me it is simply additional evidence that the time has come to review and inventory our programs." Without further elaboration, Mrs. Hobby said that her department "plans to propose legislation to strengthen administration of the program and to permit new approaches to old problems, without disrupting the important work which the state agencies are carrying on daily."

The Secretary indicated she thought the Manion Commission would look into such programs as vocational rehabilitation. She said the commission, currently studying U.S.-state relations, "offers a promise for a healthy re-examination of federal, state and local governmental interrelations, and I think we must all welcome their efforts to clarify the roles of each."

News and Views

NATION SHORT ON THERAPISTS—

The country has four thousand physical therapists, but needs eight thousand. The director of training and employment for the National Society for Crippled Children and Adults, Raymond L. Kahn, said his organization alone has a registry of three hundred openings in facilities that cannot be opened until the jobs are filled. Mr. Kahn said professional services with the handicapped pays salaries comparable with those in higher teacher-brackets. He is opposed to the school of thought that teaches segregating the handicapped in special training programs. He said that, in general, it is better to enroll the handicapped in normal educational channels and then give them any special help necessary. Placing the handicapped in a normal society has the added advantage of teaching the normal person to understand the handicapped, he said.

INTEREST HIGH IN PALSY FIGHT—

"Wonderful" was the word used to describe interest in the program to fight Cerebral Palsy. Karl K. Van Meter, executive director of United Cerebral Palsy, said services to palsied patients "are in direct proportion" to public support, and support is coming "at an astonishing rate," he declared. The goal of UCP is 60 chapters which would mean a UCP group in every county with a population of 50 thousand or more. Mr. Van Meter said there are about 550 thousand who have cerebral palsy, and this counts only those born with the disease. It does not include others who are affected by accidents or contributory disease.

VACCINATION AGAINST INFLUENZA FOUND EFFECTIVE—

The Army will vaccinate troops in certain overseas commands again this year. They have found that vaccination is effective "only when it is administered prior to the onset of epidemics."

HOEY REMOVED AS DIRECTOR PUBLIC ASSISTANCE BUREAU—

From the AMA Washington Letter it is learned that Miss Jane Hoey has been officially discharged from her post as director of the Bureau of Public Assistance in the Department of Health, Education, and Welfare. She had held this job for eighteen years. The budget under her control was in excess of $1.3 billion. The issue, which was resolved in favor of the Administration, was whether this is a policy-making post. Since it is, the Administration may appoint her successor.

MUSCLE RELAXANTS MAY BE DANGEROUS—

It is pointed out in a report of the Council on Pharmacy and Chemistry (J.A.M.A., 153: 800) that, even though standard dosage is used, muscle relaxants may cause serious difficulties. The most serious complications encountered are respiratory paralysis, circulatory collapse, and toxic manifestations involving the central nervous system. While serious difficulties are not frequent, they are not inconsiderable, and prompt the Council to make the following statement: "They (muscle relaxants) should not be used routinely or indiscriminately and should be employed only when an important advantage can be gained for the patient."

CLARIFICATIONS IN "DOCTOR DRAFT LAW"—

(From AMA News Notes, Vol. 2, No. 11)

New regulations modifying and consolidating earlier directives under the "Doctor Draft Law" (Public Law 779, 81st Congress) were issued in October by the Department of Defense. These new regulations, among other things, more clearly define professional standards of special registrants (medical). For example, a special registrant will be considered professionally acceptable if he is: (1) A graduate of an approved medical school or of a foreign medical school whose graduates are recommended for consideration by the AMA's Council on Medical Education and Hospitals; (2) A graduate of any other school and has an M.D. degree after completing a four-year medical course providing he has had 12 months of approved intern or residency training or is a diplomat of an American specialty board, and is licensed to practice medicine in any state or territory of the United States, or is a diplomat of the National Board of Examiners.

Assigning of rank will be based upon the number of years spent in appropriate professional activities subsequent to medical school graduation and prior to date of appointment. The scale for physicians and dentists is set up as follows: Less than 4 years —1st Lieutenant in Army and Air Force, Lieutenant in Navy; 4 to 11 years—Captain in Army-AF, Lieutenant in Navy; 11-18 years—Major in Army-AF, Lt. Commander in Navy; 18 or more years—Lt. Colonel in Army-AF, Commander in Navy.

Copies of the entire directive are available on request from the AMA's Council on National Emergency Medical Service.

AMEF '53 GOAL IN SIGHT—

(From AMA News Notes, Vol. 2, No. 11)

Nearing its 1953 goal of one million dollars, the American Medical Education Foundation reports that donations so far this year have amounted to more than $950,000 from 15,151 contributors. With more than a month remaining of the current year, there is a good chance that the Foundation will reach its goal. The above figures already have established a new record. In 1951, the first year of operation, the Foundation raised $745,000 from 1,836 contributors and last year's receipts totaled $906,553 from 7,259 donors.

PRACTICAL NURSES MAKING RAPID PROGRESS—

The Practical Nurses Association seems to be making strides toward security and job satisfaction. They have adopted "policies" and "salary scale," and are planning to sponsor legislation for licensure of the practical nurse in 1955. The salary scale compares quite favorably with that of the registered nurse.

NEW HOME FOR ARMED FORCES INSTITUTE OF PATHOLOGY—

The Army Institute of Pathology was founded in the midst of the Civil War. It has long ago outgrown its old house and rightly deserves the grand, new building being prepared for it on the grounds of the Walter Reed Army Medical Center in Bethesda. One of Dr. Casberg's remarks at the cornerstone laying was of great significance. He said: "It is significant that the first structure erected by the joint Armed Forces is not an arsenal or a battleship but a building dedicated to the service of humanity."

AUBURN PHYSICIAN MAKES OXYGEN ADMINISTRATION EASY—

Dr. I. W. Irwin of Auburn found a simple, easy, comfortable way of administering oxygen. The following is his own description sent to the editor by letter:

"Here is a simple little gadget which might be of interest to some physicians over the state, who wish to try it.

"In administering oxygen to many patients the tent seems to be smothery to them, especially to asthmatics. The nose, or the nose and mouth attachments often do not work too well. The nasal catheters become very uncomfortable if they have to be continued for any length of time.

"Necessity is the mother of invention. So I cut the end off a medicine dropper and place the glass end in the tubing from the oxygen tank, simply place the rubber end in the patient's nostril, and feed him the oxygen in that manner. The rubber on the dropper is large enough that it will retain itself in the nostril, and the patient can remove it or replace it at will. The patient likes it and it works. No irritation whatever and no fussing around with gadgets."

MORE FUNDS SET ASIDE FOR SCHOLARSHIPS IN SURGERY—

The Woman's Auxiliary of the United States and Canadian sections of the International College of Surgery have set aside $6,500 to be used in grants for surgical scholarships. Three thousand dollars is to help finance study abroad by an American or Canadian surgeon, and a like amount for a foreign surgeon to study in the U.S. or Canada. Five hundred dollars will be granted a senior medical student at the University of British Columbia in Vancouver, B.C.

DOCTOR BAYNE-JONE HONORED BY ARMY—

Doctor Bayne-Jones served in World War I and again in World War II. For these services he had received the Distinguished Service Medal, Silver Star, the Army Commendation Ribbon, and the U.S.A. Typhus Commission Medal, the Military Cross, Order of the British Empire, and the French Croix de Guerre with bronze star. Now, as Technical Director of Research, Medical Research and Development Board, he has become the first to receive the grade GS-17, a "super grade," from the Department of the Army.

Announcements

REFRESHER COURSE FOR MEDICAL TECHNOLOGISTS—

The University of Kansas will present a refresher course in medical technology, Jan. 11 to 13, inclusive, at K.U. Medical Center, Kansas City, Kansas. There will be lectures, demonstrations and panel discussions. The panel discussions will provide an opportunity for special discussions and demonstrations of laboratory techniques by an outstanding faculty group. Course is open to all who serve in medical laboratories, registered or not, upon payment of $12.00, enrollment fee. Write Harold G. Inghram, University of Kansas Medical Center, Kansas City 3, Kansas.

BLOOD PLATELET GROUPS IDENTIFIED—

Evidence that blood platelets can be grouped and typed like the red cells was presented before the American Association of Blood Banks, by Mario Stephanini, on October 19th. The four groups and six types so far identified are sometimes incompatible, like the four blood groups and the Rh and non-Rh bloods.

BLOOD PRESSURE STUDIES IN PEOPLE OVER SIXTY—FIVE UNDERTAKEN—

The New York Heart Association, Mount Sinai Hospital of New York and the Metropolitan Insurance Company have undertaken a study of blood pressures in people sixty-five years old and over. For this purpose questionnaires have been sent to a large number of physicians, about one out of ten. The possible importance of a closer determination of the normals for this age group prompts the Journal to urge those who receive questionnaires to comply with the request, and to cooperate in the study by completing the forms and returning them, as requested.

ANOTHER FLORIDA MIDWINTER SEMINAR FOR E.E.N.T.—

The eighth annual University of Florida Midwinter Seminar in Opthalmology and Otolaryngology will be held at the Sans Souci Hotel in Miami Beach the week of Jan. 18, 1954. Lectures by well known men in these specialities, the Midwinter Convention of the Florida Society of Opthalmologists and Otolaryngologists, a banquet on Wednesday, and other activities will still leave ample time for recreation. Write Shaler Richardson, M.D., at The Graduate School of Medicine, University of Florida.

MANDATORY NURSE PRACTICE ACT EFFECTIVE SEPTEMBER, 1953—

The Director, State Board of Education and Registration for Nurses, requests that doctors notify all nurses employed by them as follows: "The State Board of Education and Registration for Nurses in Nebraska is operating under a Mandatory Nurse Practice Act which became effective September, 1953. This act eliminates the non-practice status and requires registration of every nurse wishing to practice as a registered nurse desiring to use the letter R.N."

AMERICAN ACADEMY OF DERMATOLOGY AND SYPHILOLOGY WILL MEET—

The twelfth annual meeting of the academy will be held December 5-10, in the Palmer House, Chicago. Lecture courses, panels, symposia, and informal discussions will be featured, together with basic courses in histopathology, mycology, x-ray and radium, bacteriology and virology of the skin and many other interesting subjects.

ANOTHER OPHTHALMOLOGICAL EVENT—

The Midwest Section of the Association for Research in Opthalmology will hold its annual meeting February 7, 1954, at the University of Chicago, School of Medicine, Chicago 37, Illinois. This meeting will be preceded, on Friday and Saturday, by the Annual Clinical Conference of the Chicago Ophthalmological Society, to be held at the Drake Hotel.

Coming Medical Events

CRIPPLED CHILDREN'S CLINICS—

December 5, McCook, St. Catherine's Hospital
December 12, Grand Island, St. Francis Hospital
January 9, Lexington, High School
January 13, Norfolk, Norfolk State Hospital
February 6, North Platte, High School
February 20, Scottsbluff, St. Mary Hospital

The Woman's Auxiliary

GENERAL ORGANIZATION SUGGESTIONS*

The broad aspect indicated by this title could well lead to careless digression from my particular commitment for discussion. The topic is as broad as an organizer's concept of how to organize an auxiliary. There are, perhaps, as many ways to organize as there are chairmen of our fifty-one National units, and when I read from one of their discussions that "there is nothing new in organization." I accepted that as a challenge to my ability to have a better organization in Nebraska.

For better organization, we do **not** mean a changed plan, but an improved plan.

GRANTED:

1. That the work of every committee contributes to the success of the organization committee.
2. That membership increases when we give better programs.
3. That an inspired chairman of organization will activate a few more enthusiasts.

BUT IS IT GRANTED:

1. That we defeat organization by an overwhelming activity demand which, on the surface, appears to have an unattainable fulfillment.
2. That all that has been said for organization is convincing and adequate to win new members.
3. That the file and correspondence of succeeding chairmen of organization will yield the answers to new chairmen and their problems.
4. That our parent medical group will advise us on what to do.
5. That someone else's experience will teach us how to proceed.

May I say that, as our year's work shapes up in Nebraska, I am delighted to find constant, valuable help in the wives of individual doctors who are "organized" in their own plan for living. According to the dictionary, "organized" simply means — getting into proper working order.

Individually, we have to see and feel the obligations of our auxiliary. Then we need to organize our talents and energies in systematic preparation for action. We join, then, with other auxiliary members and become an ally, a confederate in some enterprise for health's sale. The arrangement of these working units into an aggregate body is the key to organization. Jointly, we are able to influence, to assist and to support—which definies "Auxiliary."

The new thing in organization then, is with the individual. We should help each doctor's wife to find her field of usefulness; encourage her to identify her effort with auxiliary membership; give service to her community; and together we shall progress.

MRS. JAMES P. DONELAN,
President, Nebraska State
Medical Assn. Woman's Auxiliary.

LET'S ORGANIZE

It is a privilege and a pleasure to belong to the Women's Auxiliary to the Medical Association. We only wish we could call on each doctor's wife in Nebraska to discuss personally the advantages of belonging to an organized auxiliary.

We know that you all donate a great deal of time and energy toward community betterment and various philanthropies. However, the National Auxiliary is not aware of the work that is being done in Nebraska by the doctors' wives because a full report does not reach them. Why? Because we have not yet organized in every county and thus you do not get credit for the worthwhile work you do.

It is not difficult to organize an auxiliary. Perhaps many of you have felt interested in organizing some time in the future — why not do it this year? A brief outline of steps of procedure, as suggested by National, might prove helpful to you:

1. Get permission from your County Medical Society to organize an auxiliary.
2. Get a list of all physicians in your Medical Society—contact their wives and interest them in your plans. (A personal call, if possible, is more effective than a letter).

3. When the organization has been approved by the Medical Society arrange a meeting with all the doctors and their wives, also include the state president and the organization chairman of the auxiliary.
4. At the meeting a resolution to organize is adopted — the women sign the roster and become charter members of the Women's Auxiliary to your County Medical Society.

We realize that no two groups are confronted with the same problems. The number of possible members, and the distance they live apart will enter into your planning. However, there are no obstacles that cannot be worked out if you will let us help you. Please feel free to write us about any questions or doubts you might have about organizing. If you will just drop us a card to show that you are interested in organizing we will be happy to discuss plans for your particular district.

MRS. L. E. SHARRAR,
1919 South Pershing Road, Lincoln,
State Organization Chairman.

Mrs. James Donelan, Omaha, state president of the Woman's Auxiliary of the Nebraska State Medical Association was guest speaker at a dinner meeting of the Nebraska City Medical Society and Auxiliary. She discussed the aims of the organizations. After the dinner meeting members of the society met with Mrs. Clara Witt, director of the public welfare department, together with the county commissioners, to discuss old age assistance medical details.

The Cheyenne-Kimball-Deuel County Medical Society met in Kimball, Nebraska, Wednesday, October 28th. Dr. W. Brown, Scottsbluff pathologist, spoke on "Diseases of the Adrenal Glands." Twenty-two members of the society and their wives were present.

The Adams County Medical Society Auxiliary met following a joint dinner session with the Adams County Medical Society at the Hastings State Hospital on October 13, 1953.

Mrs. O. A. Kostal presided at a short business meeting. Gerald Aldridge, administrator of the Mary Lanning Memorial Hospital, spoke concerning the organization of a Mary Lanning Memorial Hospital Women's Auxiliary within the National Hospital Women's Auxiliary. He explained that the main purpose of such an auxiliary would be to make the stay of the pateint in the hospital more pleasant by giving more individual service.

The Auxiliary voted to sponsor organization of the new group which will include women from various Hastings clubs, civic, and church groups. The committee in charge is Mrs. Warren Richards, Mrs. G. Lee Sandritter and Mrs. Gerald A. Kuehn.

The Adams County Medical Auxiliary entertained at a tea at the home of Mrs. G. Lee Sandritter at the Hastings State Hospital Tuesday, October 20th. The purpose of the meeting was for the presentation of a plan for the formulatoin of a Mary Lanning Memorial Hospital Auxiliary. Mrs. O. A. Kostal, Auxiliary president, presided. Gerald L. Aldridge, administrator of the Mary Lanning Hospital presented the plan. The proposed hospital auxiliary would include women of Hastings. The presidents of women's organizations in Hastings were invited to attend the tea.

Dr. Leland Olsen of Omaha addressed the Tri-County Medical Association Monday, October 12th, at a dinner meeting at the Fremont Golf Club. Doctor Olsen's topic was "Obstetrical Problems." The Tri-County Medical Auxiliary heard a book review presented by Mrs. Leslie Sauer of Tekamah.

Plans to assist in the handicapped children's room at West Lawn school in Grand Island were discussed when members of the Hall County Medical Auxiliary met recently at the home of Mrs. George Demay. The women will make toys and other articles for physical therapy. Mrs. John S. Anderson described the activities of the children. Hostesses for a dessert luncheon that preceded the business meeting conducted by Mrs. Warren Bosley, were Mrs. Carl Maggiore, Mrs. L. S. Kau, Mrs. Harvey Anderson, Mrs. John F. Campbell, Mrs. DeMay, Mrs. Ervin King of Wood River and Mrs. J. Y. Raccines of Palmer.

The Lancaster County Medlical Auxiliary met at Orthopedic Hospital Nurses Home, Monday, November 2nd. Dr. F. L. Spradling of the State Hospital spoke on the Recreation Program at the State Hospital.

MRS. DONALD F. PURVIS,
Publicity Chairman.

PROGNOSIS OF BREAST CANCER POORER IN WOMEN UNDER 40

Women under 40 years of age with cancer of the breast have a comparatively poorer prognosis than those over 40, in the opinion of Drs. Edward F. Lewison, Frances H. Trimble and Paul C. Griffith, Baltimore.

They reached this conclusion after a 10-year follow-up study of 220 women, ranging in age from 27 to 90 years, who were surgically treated for cancer of the breast at Johns Hopkins Hospital between 1935 and 1940. Two hundred and four patients (93 per cent) were treated by means of complete removal of the breast and lymph nodes in armpits, 14 patients (6 per cent) by removal of the breast only, and two patients (one per cent) received only local excision.

The five-year survival rate for women under the age of 40, regardless of the type of treatment or the stage of the disease, was only 29.6 per cent (eight out of 27 patients). This was in contrast to the five-year survival rate for all patients of 43.2 per cent, the doctor wrote in a recent issue of Journal of the American Medical Association.

FROM A GALLEY PROOF—

". . . Unless the patient is obviously progressing very rapidly (in labor) the collection of a urine specimen, the administration of an enema, and the shaving and cleansing of the PUBLIC and perineal area are accomplished."

1953 Membership Roster — Nebraska State Medical Association

FIRST DISTRICT

PAUL READ, Councilor

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Albertson, L. C.
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Hyattsville, Md.
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4826 South 24th St.
Andersen, M. C.
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1107 Medical Arts Bldg.
Anderson, Lawrence L.
1314 Medical Arts Bldg.
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Bantin, E. W.
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Best, R. Russell
527 Medical Arts Bldg.
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1613 Medical Arts Bldg.
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1120 Medical Arts Bldg.
Block, Max
432 Brandeis Theatre Bldg.
Boler, Thomas D.
718 Barker Bldg.
Bonniwell, Chas. M.
8613 North 30th St.
Borghoff, J. A.
1319 Medical Arts Bldg.
Boyne, H. N.
1302 Medical Arts Bldg.
Bozarth, Elton P.
4617 North 24th St.
Bradley, James D.
Plattsburg, New York
Brazer, J. G.
63rd and Maple St.
Brinkham, H. H.
6014½ Military Ave.
Brodkey, M. H.
320 Medical Arts Bldg.
Brousseau, Edward R.
3706 North 59th St.
Brown, Alfred (Life)
1618 Medical Arts Bldg.
Brown, Loy T.
(Service)
Brush, John H.
1326 Medical Arts Bldg.
Bryngelson, Jared L.
(Service)
63rd and Maple St.
Bucholz, Donald J.
3610 Dodge St.
Burney, Dwight W., Jr.
527 Medical Arts Bldg.
Burns, B. C.
421 Farm Credit Bldg.
Bushman, L. B. (Life)
627 City Natl. Bank Bldg.
Callfas, W. F. (Life)
Pasadena 2, California
Cameron, O. J.
1520 Medical Arts Bldg.
Campbell, Louis S.
527 Medical Arts Bldg.
Carnazzo, S. J.
712 Barker Bldg.
Carp, Oscar
516 Medical Arts Bldg.
Cassidy, W. A.
1020 Medical Arts Bldg.
Catania, Nancy
418 Brandeis Theatre
Christensen, Julius
1326 Medical Arts Bldg.
Christlieb, J. M.
4702½ South 24th St.
Clark, George L.
4924 California St.
Clarke, F. S. (Life)
314 Medical Arts Bldg.
Cloyd, A. D., Jr.
(Deceased 11-9-53)
Cochran, Robert M.
452 Aquila Court
Coe, John D.
413 Medical Arts Bldg.
Comine, J. J.
820 Medical Arts Bldg.
Connolly, E. A.
502 Medical Arts Bldg.
Connors, E. K.
1618 Medical Arts Bldg.
Cook, Lyman J.
1612 Medical Arts Bldg.
Cotton, Walter T.
708 Medical Arts Bldg.
Courtney, J. E.
730 City Natl. Bank Bldg.
Cox, Russell
St. Joseph's Hospital
Crofoot, Michael
670 North 50th St.
Davis, Allan
629 Medical Arts Bldg.
Davis, Edwin
1436 Medical Arts Bldg.
Davis, Edwin, Jr.
Broomall, Penn.
Davis, Herbert H.
1204 Medical Arts Bldg.
Davis, J. Calvin
425 Aquila Court
DeLanney, L. A.
721 Medical Arts Bldg.
DeLong, Henry
140 South 40th St.
Dendinger, W. M.
402 Aquila Court
Dewey, John L.
104 South 39th St.
Dickerson, Wm. J.
5010 Dodge St.
Dickinson, Robert H.
3610 Dodge St.
DiStefano, Carmelo
721 Medical Arts Bldg.
Doan, Duane I.
402 Aquila Court
Dolezal, Joseph B.
401 City Natl. Bank Bldg.
Donahue, Francis D.
274 Aquila Court
Donelan, James P.
Guarantee Mutual
Life Ins. Company
Doolittle, H. H.
1307 Medical Arts Bldg.
Dow, A. G.
314 Medical Arts Bldg.
Dowell, D. A.
816 Medical Arts Bldg.
Drdla, Theodore
460 Aquila Court
Drozda, Joseph P.
1315 Deer Park Blvd.
Dunn, F. Lowell
737 Medical Arts Bldg.
Dworak, Henry L.
612 Medical Arts Bldg.
Dwyer, J. R. (Life)
Council Bluffs, Ia.
Eagle, Frank L.
1620 Medical Arts Bldg.
Egan, Richard L.
St. Joseph's Hospital
Egan, Wm. J.
456 Aquila Court
Elston, Harry R.
4930 South 24th St.
Endres, Gregory L.
5811 Military Avenue
Engdahl, Wallace E.
8613 North 30th St.
Everitt, N. J.
4838 South 24th St.
Ewing, Ben F.
220 Medical Arts Bldg.
Ewing, John D.
220 Medical Arts Bldg.
Farrell, Chester H.
721 Medical Arts Bldg.
Farrell, Robert F.
411 Medical Arts Bldg.
Fellman, A. C.
316 City Natl. Bank Bldg.
Filkins, John C.
415 City Natl. Bank Bldg.
Findley, David
446 Aquila Court
Findley, Palmer (Life)
446 Aquila Court
Finegan, James
415 Medical Arts Bldg.
Finlayson, Allister T.
1527 Medical Arts Bldg.
Fitzgibbons, Robert J.
468 Aquila Court
Fleishman, Max
260 Aquila Court
Flory, David W.
Ft. Sam Houston, Texas
Follman, J. C.
306 South 24th St., Rm. 9
Foster, Miles E., Jr.
1521 Rockbrook Road
Francis, Marvin B.
106 W. 20th St.
Bellevue, Nebr.
Frandsen, Charles
(Deceased 6-20-53)
Frank, Muriel M.
Methodist Hospital
Freed, Albert E.
5010 Dodge St.
Freymann, John J.
1113 Medical Arts Bldg.
Friel, R. J.
3223 Dodge St.
Gardiner, J. F.
628 Medical Arts Bldg.
Gatewood, John W.
326 Medical Arts Bldg.
Gedgoud, John L.
304 South 42nd St.
George, John H.
(Service)
Gerald, H. F. (Life)
2871 Newport Ave.
Giffen, Horace K.
Immanuel Hospital
Gifford, Harold
1620 Medical Arts Bldg.
Gillick, F. G.
Dean, Creighton University
Gleeson, John J.
601 City Natl. Bank Bldg.
Goodrich, Guy W.
620 Omaha L. & B. Assn.
Graham, William E.
528 Medical Arts Bldg.
Greenberg, A.
320 Medical Arts Bldg.
Greenberg, M. M.
516 Medical Arts Bldg.
Greene, Arthur M.
918 Medical Arts Bldg.
Grier, John J.
1307 Medical Arts Bldg.
Grier, M. E.
1307 Medical Arts Bldg.
Gross, Joseph F.
1140 Medical Arts Bldg.
Garnett, Thos. J.
Mayo Clinic,
Rochester, Minn.
Hahn, W. N.
517 City Natl. Bank Bldg.
Hall, Lynn T. (Life)
(Deceased 7-10-53)
Hamilton, Frank T.
257 Aquila Court
Hamsa, W. R.
527 Medical Arts Bldg.
Hankins, Chas. R.
1414 Medical Arts Bldg.
Hansen, Clifford H.
527 City Natl. Bank Bldg.
Hansen. Wm. Gordon
305 South 38th St.
Hardy, C. C.
1216 Medical Arts Bldg.
Harris, T. T.
1007 Medical Arts Bldg.
Hartigan, John
915 Medical Arts Bldg.
Hartmann, Clarence
6603 North 30th St.
Hawkins, Robert E.
211 Medical Arts Bldg.
Hellwig, J. W. (Life)
5221 Jones St.
Hennegan, G. F.
6110 Military Ave.
Henske, J. A. (Life)
1312 North 40th St.
Herbert, H. J.
415 City Natl. Bank Bldg.
Hermann, Harlan T.
105 South 49th St.
Heumann, J. M. F. (Life)
6110 Military Ave.
Heywood, L. Thomas
1307 Medical Arts Bldg.
Hickey, Charles (Life)
Bennington, Nebr.
Hill, F. C.
430 Aquila Court
Hoffman, L. O.
1012 Medical Arts Bldg.
Holden, W. J.
462 Aquila Court
Hood, L. Thomas
831 Medical Arts Bldg.
Horwich, Joseph M.
717 Kilpatrick Bldg.
Hotz, Harley
1013 Redick Tower
Houfek, Edward
105 South 49th St.
Howard, M. C.
802 Medical Arts Bldg.
Hruby, Allan J.
2906 Leavenworth
Hubbard, Theodore L.
Creighton University
Hughes, Leo V.
3610 Dodge St.
Hull, Wayne M.
104 South 39th St.
Hungerford, Wm. E.
1904 Spencer St.
Hunt, H. B.
Methodist Hospital
Isacson, Sven
826 City Natl. Bank Bldg.
Jackson, Donald R.
5010 Dodge St.
Jahr, Herman M.
111 South 39th St.
James, C. S.
615 Medical Arts Bldg.
Jenkins, Harry J.
1113 Redick Tower
Jensen, Werner P.
1420 Medical Arts Bldg.
Johnson, A. C.
326 Medical Arts Bldg.
Johnson, George N.
4803 South 24th St.
Johnson, Herman F.
831 Medical Arts Bldg.
Johnson, J. A.
602 Omaha L. & B.
Johnson, Richard N.
4803 South 24th St.
Jones, Wesley
2715 North 24th St.
Joyer, Robert M.
(Service)
Judd, J. H.
1020 Medical Arts Bldg.
Kadavy, G. J.
2703 South 16th St.
Kalin, John A.
2204 Military Ave.

Kammandel, Henry
307 Medical Arts Bldg.
Keegan, J. Jay
1527 Medical Arts Bldg.
Kelley, J. Whitney
1104 City Natl. Bank Bldg.
Kelley, Wm. E.
1104 City Natl. Bank Bldg.
Kelly, James F.
816 Medical Arts Bldg.
Kelly, James F., Jr.
816 Medical Arts Bldg.
Kemp, Wm. T.
2828 North 16th St.
Kennedy, H. B.
Insurance Bldg.
Kennedy, John C.
1407 Medical Arts Bldg.
Kenney, B. V.
424 North 38th St.
Kirk, E. J.
434 Aquila Court
Klabenes, Frank J.
1020 Medical Arts Bldg.
Kleitsch, Wm. P.
V. A. Hospital
Kleyla, John R.
712 Medical Arts Bldg.
Korth, Z. N.
1319 Medical Arts Bldg.
Kovar, W. R.
1120 Medical Arts Bldg.
Kovarik, James R.
3568 Dodge St.
Kroupa, W. E.
3568 Dodge St.
Kulesh, Morton
Council Bluffs, Iowa
Langdon, Edward
1414 Medical Arts Bldg.
Latenser, John
1429 Medical Arts Bldg.
Lawton, Richard L.
Mattoon, Illinois
Lee, Leroy W.
1436 Medical Arts Bldg.
Lehnhoff, Henry J.
607 Medical Arts Bldg.
Lempka, Arnold W.
502 Medical Arts Bldg.
Lennox, G. B.
2527 Patrick St.
Levine, Victor E.
Creighton University
Lewis, Raymond G.
5012 Dodge St.
Lipp, Frank E.
830 City Natl. Bank Bldg.
Lombardo, Anthony J.
401 Aquila Court
Long, Robert S.
826 Medical Arts Bldg.
Longo, Charles A.
2225 Jefferson,
Bellevue, Nebr.
Longo, Joseph A.
714-19 W.O.W. Bldg.
Loomis, George W.
607 Medical Arts Bldg.
Lovely, Frank T.
1229 First Natl. Bank Bldg.
Lovgren, Robert E.
536 Medical Arts Bldg.
Lucas, J. F.
815 W.O.W. Bldg.
Luikart, Ralph
708 Medical Arts Bldg.
Lyman, E. D.
City Health Department
1201 South 42nd St.
MacQuiddy, E. L.
478 Aquila Court
MacQuiddy, E. L., Jr.
478 Aquila Court
Madsen, C. C.
6104½ Military Ave.
Magiera, Stephen L.
525 City Natl. Bank Bldg.
Malashock, Edward M.
1436 Medical Arts Bldg.
Mangimelli, Samuel T.
712 Barker Bldg.
Manning, E. T. (Life)
(Deceased 6-5-53)
Margolin, J. Milton
902 Medical Arts Bldg.
Margolin, Morris (Life)
902 Medical Arts Bldg.
Marsh, Charles
Valley, Nebr.
Martin, James W.
1420 Medical Arts Bldg.
Martin, Paul J.
1614 Medical Arts Bldg.

Mauer, R. T.
1520 Medical Arts Bldg.
McArdle, G. Prentiss
1216 Medical Arts Bldg.
McAvin, J. S.
Lutheran Hospital
McCarthy, Harry H.
326 Medical Arts Bldg.
McCarthy, J. D.
1036 Medical Arts Bldg.
McCleneghan, Sam (Life)
615 City Natl. Bank Bldg.
McDermott, Arnold
712 Medical Arts Bldg.
McFadden, Harry W., Jr.
University of Nebr.,
College of Medicine
McGee, Harry E.
1126 City Natl. Bank Bldg.
McGee, J. W.
430 Aquila Court
McGee, Millard Blair
305 South 38th St.
McGoogan, Leon S.
3568 Dodge St.
McGuire, L. D.
326 Medical Arts Bldg.
McLaughlin, C. W., Jr.
413 Medical Arts Bldg.
McMartin, Charles (Life)
611 City Natl. Bank Bldg.
McMartin, W. J.
611 City Natl. Bank Bldg.
McMillan, Aaron M.
2892 Miami
McMurtrey, George B.
304 City Natl. Bank Bldg.
McNamara, J. W.
633 City Natl. Bank Bldg.
McWhorter, Clarence
3853 North 65th Ave.
Melcher, Wm. H.
4826 South 25th St.
Mercer, Nelson S.
2506 Dodge St.
Milam, Denver F.
611 City Natl. Bank Bldg.
Miller, Daniel
830 City Natl. Bank Bldg.
Millett, Clinton C.
3610 Dodge St.
Mnuk, Frank J.
3374 South 13th St.
Montgomery, E. C.
1620 Medical Arts Bldg.
Moody, W. B.
530 Medical Arts Bldg.
Moon, C. F.
1607 Medical Arts Bldg.
Moon, Louis E.
1326 Medical Arts Bldg.
Moore, Clyde
319 Medical Arts Bldg.
Moore, Ralph C.
Methodist Hospital
Morris, Haskell
530 Medical Arts Bldg.
Morrison, Wm. Howard
1500 Medical Arts Bldg.
Morrow, Paul N.
3610 Dodge St.
Moser, R. A.
1407 Medical Arts Bldg.
Muehlig, G. Kenneth
7805 Pine St.
Muehlig, W. A.
636 Medical Arts Bldg.
Murphy, Albert V.
1614 Medlical Arts Bldg.
Murphy, Charles M.
5701 Military Ave.
Murphy, J. Harry
915 Medical Arts Bldg.
Murphy, Robert E.
(Service)
Murray, F. J.
63rd and Maple St.
Muskin, Nathan
619 Medical Arts Bldg.
Neligh, Rosalie B.
Woodmen Circle,
33rd and Farnam
Nelson, Floyd C.
2734 North 61st St.
Nemec, C. J.
629 City Natl. Bank Bldg.
Nemec, Edward C. (Life)
629 City Natl. Bank Bldg.
Neu, Harold N.
324 City Natl. Bank Bldg.
Newman, Elton
Salt Lake City, Utah
Nickum, Oliver C.
721 Medical Arts Bldg.

Niehaus, Friedrich W.
1622 Medical Arts Bldg.
Nilsson, Donald C.
115 North 40th St.
Nilsson, John Fred
612 Omaha L. & B.
Nolan, W. J.
203 Baldridge Bldg.
Novak, W. F.
711 Medical Arts Bldg.
Oberst, Byron B.
304 South 42nd St.
Offerman, A. J.
4805½ South 24th St.
O'Hearn, J. J.
4811½ South 24th St.
Olson, Leland J.
1107 Medical Arts Bldg.
O Neill, Gerald C.
3610 Dodge St.
O'Neill, James J.
211 Medical Arts Bldg.
Owens, C. A., Jr. (Life)
Santa Monica, Calif.
Pantano, Anthony R.
907 W.O.W. Bldg.
Pederson, Stanley E.
3842 North 65th St.
Pepper, M. L.
1515 Medical Arts Bldg.
Pinne, George F.
453 Aquila Court
Placek, Louis T.
425 Aquila Court
Pleiss, Joseph A.
716 Medical Arts Bldg.
Potter, Stanley E.
527 Medical Arts Bldg.
Pratt, Peyton T.
528 Medical Arts Bldg.
Prichard, George W.
3013 Ames Ave.
Pruner, A. C.
402 Medical Arts Bldg.
Quigley, D. T. (Life)
721 Medical Arts Bldg.
Quigley, W. H.
636 Medical Arts Bldg.
Ragan, Lloyd E.
(Service)
Rance, W. T.
730 City Natl. Bank Bldg.
Rasgorshek, R. H.
425 Aquila Court
Rasmussen, John A.
527 Medical Arts Bldg.
Read, Paul S.
2415 Fort St.
Redgwick, J. P.
1530 Medical Arts Bldg.
Reedy, Wm. J.
324 City Natl. Bank Bldg.
Rees, Barney B.
1120 Medical Arts Bldg.
Riley, B. M. (Life)
538 City Natl. Bank Bldg.
Ring, Floyd O.
237 Aquila Court
Robertson, G. E.
308 South 39th St.
Root, Charles M.
3610 Dodge St.
Rouse, James W.
(Service)
Rubnitz, A. S.
732 Medical Arts Bldg.
Ruch, R. O.
912 Medical Arts Bldg.
Rucker, G. Lucille
2314 Spencer St.
Rumbolz, Wm. L.
1611 Medical Arts Bldg.
Russum, B. C.
816 Medical Arts Bldg.
Ryder, James E.
2321 M St.
Sachs, Adolph
527 City Natl. Bank Bldg.
Sage, Earl C.
1234 Medical Arts Bldg.
Schenken, John R.
Methodist Hospital
Schmitz, W. H.
611 City Natl. Bank Bldg.
Schrock, R. D.
831 Medical Arts Bldg.
Schwertly, F. J.
614 Barker Bldg.
Scott, Nathaniel C.
304 City Natl. Bank Bldg.
Severin, Mathew J.
4823 South 24th St.
Shearer, W. L.
1226 Medical Arts Bldg.

Sher, Phillip
424 Brandeis Theatre
Shramek, C. J.
511 Redick Tower
Shramek, J. M. (Life)
Savanna, Illinois
Simanek, George F. (Life)
Colorado Springs, Colo.
Simmons, E. E.
826 Medical Arts Bldg.
Simonds, Francis L.
1216 Medical Arts Bldg.
Simpson, J. E.
1229 First Natl. Bank Bldg.
Skoog-Smith, Anton
Clarkson Hospital
Slunicko, Jules A.
316 Exchange Bldg.,
South Omaha
Slutzky, Ben
Creighton University
Smith, Edward J.
443 Aquila Court
Smith, Richard Dale
1618 Medical Arts Bldg.
Smith, Thomas T.
211 Medical Arts Bldg.
Sobota, Jos. E.
3019 Ames St.
Solomon, W. W.
3024 North 24th St.
Srb, Adolph F.
1719 South 16th St.
Staubitz, Herbert F.
406 Aquila Court
Stearns, R. J.
620 Omaha L. & B.
Steinberg, A. A.
536 Kilpatrick Bldg.
Steinberg, M. M.
830 City Natl. Bank Bldg.
Stoner, Maurice E.
628 Medical Arts Bldg.
Strickland, W. R.
514 Omaha L. & B.
Sucha, W. L.
915 Medical Arts Bldg.
Sullivan, H. T.
1036 Redick Tower
Swab, C. M.
1316 Medical Arts Bldg.
Swab, Elizabeth M.
1316 Medical Arts Bldg.
Swenson, Samuel A., Jr.
1234 Medical Arts Bldg.
Swenson, S. A., Sr.
1234 Medical Arts Bldg.
Swoboda, Jos. P.
4824½ South 24th St.
Tamisiea, John A.
718 Barker Bldg.
Tanner, John W.
Elkhorn, Nebr.
Taylor, W. H. (Life)
3809 Cuming St.
Taylor, Willis H., Jr.
3807 Cuming St.
Therien, R. C.
3482 Martin Ave.
Thomas, John Martin
1418 Medical Arts Bldg.
Thompson, C. Q.
1530 Medical Arts Bldg.
Thompson, Dorothy H.
Methodist Hospital
Thompson, Lynn W.
Lutheran Hospital
Thompson, Warren Y.
1530 Medical Arts Bldg.
Tollman, J. P.
Dean, Univ. of Nebraska
College of Medicine
Tomlinson, C. C. (Life)
1520 Medical Arts Bldg.
Tompkins, Chas. A.
304 South 42nd St.
Torpy, T. W. (Life)
(Deceased 7-9-53)
Trimble, C. R.
4505 North 40th St.
Truhlsen, Stanley M.
1500 Medical Arts Bldg.
Tyson, John J.
Veterans Hospital
VaVerka, James W.
219 Medical Arts Bldg.
Vetter, J. G.
721 W.O.W. Bldg.
Vickery, Austin L., Jr.
(Service)
Vickery, Robert D.
237 Aquila Court

Vroman, Donald C.
3568 Dodge St.
Walsh, E. M.
1412 Medical Arts Bldg.
Walvoord, Carl A.
4134 Grand Ave.
Waters, C. H. (Life)
832 Fairacres Road
Waters, Chester H., Jr.
831 Medical Arts Bldg.
Watke, F. M. (Life)
4937 Woolworth
Wearne, F. J. (Life)
Hill Hotel
Whitcomb, Glenn D.
926 Medical Arts Bldg.
Wigton, Robert S.
105 South 49th St.
Williams, Russell R., Jr.
443 Aquila Court
Wilson, Carlyle E., Jr.
1234 Medical Arts Bldg.
Wilson, Donald J.
1113 Medical Arts Bldg.
Wilson, R. B.
University Hospital
(Lancaster Co.)
Wittson, Cecil L.
Univ. of Nebraska,
College of Medicine
Wright, W. D.
652 North 66th St.
Wyrens, Raymond J.
316 Medical Arts Bldg.
Young, G. Alexander
105 South 49th St.
Young, George A., Jr.
1436 Medical Arts Bldg.
Young, Richard H.
(Deceased 8-10-53)
Zukaitis, R. R.
(Service)

SARPY

PAPILLION

Baca, D. E.

SECOND DISTRICT

W. C. KENNER, Councilor

LANCASTER

LINCOLN—

Adams, R. B.
2972 "O" St.
Albin, W. L. (Life)
4621 South St.
Alcorn, F. A.
2201 South 11th St.
Andrews, Clayton F.
641 Stuart Bldg.
Angle, E. E.
903 Sharp Bldg.
Arnholt, M. F.
3421 "O" St.
Arnold, C. H.
915 Trust Bldg.
Bailey, R. O.
Waterloo, Iowa
Bancroft, Paul M.
1431 South 33rd St.
Bartels, W. W.
1108 Sharp Bldg.
Barthell, John H.
918 Sharp Bldg.
Becker, W. C.
826 Sharp Bldg.
Bitner, Mary S.
State Capitol
(Platte County)
Black, Paul
929 Stuart Bldg.
Blattspieler, Lucien H.
Worthington, Minn.
Blum, Henry
Room 2,
Nebr. Theatre Bldg.
Bowman, D. J. (Life)
3635 Mohawk
Brolsma, M. P.
302 Woodman Accident Bldg.
Brooks, E. B.
939 Stuart Bldg.
Brown, John A.
412 Lincoln Lib. Life Bldg.
Brown, Schuyler P.
V.A. Hospital
Bruskewitz, Harold
903 Sharp Bldg.
Burby, John J.
901 South 48th St.
Calhoun, O. V.
(Deceased 11-2-53)
Campbell, W. A.
1321 Sharp Bldg.
Carveth, W. W.
626 Sharp Bldg.
Cherry, L. D.
921 Stuart Bldg.
Churchill, I. W.
1945 "A" St.
Clothier, John G.
Vets Adm.,
12th and "O" St.
Cole, Frank
2430 Lake St.
Coleman, F. D.
925 Stuart Bldg.
Covey, George W.
805 Sharp Bldg.
Curry, John R.
943 Stuart Bldg.
Davies, L. T.
816 Sharp Bldg.
Dean, G. W.
817 South 27th St.
Deppen, E. N.
526 Trust Bldg.
Edwards, C. B.
1846 "B" St.
(Buffalo County)
Elliott, C. K.
949 Stuart Bldg.
Emerson, Clarence
1700 South 24th St.
Fahnestock, C. L. (Life)
1812 South 26th St.
Ferciot, C. F.
1108 Sharp Bldg.
Fijan, Kenneth J.
1037 Stuart Bldg.
Finkle, B. A.
1419 Sharp Bldg.
Finney, L. E.
323 South 14th St.
Flanagan, M. L.
5515 South St.
Flansburg, H. E.
502 Bankers Life Bldg.
Frazer, M. D.
1037 Stuart Bldg.
Fuenning, S. I.
317 North 18th St.
Furgason, A. P. (Life)
3710 Folson St.
Garlinghouse, R. E.
723 Sharp Bldg.
Garlinghouse, R. O.
921 Stuart Bldg.
Getscher, Philip E.
306 Sharp Bldg.
Gibson, L. V.
915 Trust Bldg.
Gilbert, Louis W.
1016 Sharp Bldg.
Goetowski, Paul
1108 Sharp Bldg.
Gogela, Louis J.
1318 Sharp Bldg.
Gordon, John R.
V.A. Hospital
Grant, Robert S.
1431 South 33rd St.
Griffith, Wylie H.
Clinton, Iowa
Hancock, E. W.
823 Sharp Bldg.
Hanigan, J. J.
Hallam, Nebraska
Hanson, Hodson A.
820 Sharp Bldg.
Harms, C. W.
Rm. 401, 116 South 15th St.
Harrington, A. E.
914 Stuart Bldg.
Harvey, Harold E.
Columbia, Missouri
Harvey, H. E.
723 Sharp Bldg.
Hasty, Robert C.
V.A. Hospital
Hathaway, F. H.
308 First Natl. Bank Bldg.
Heidrick, Paul J.
857 Stuart Bldg.
Hervert, J. Wm.
807 Federal Sec. Bldg.
Hickman, C. C.
1641 "J" St.
Hillyer, R. A.
800 South 13th St.
Hilton, Hiram D.
1037 Stuart Bldg.
Hobbs, E. T.
6530 Holdrege St.
Hohlen, K. S. J.
914 Federal Sec. Bldg.
Hompes, J. J.
702 Sharp Bldg.
Hummel, R. O. (Life)
2435 Bradfield Drive
Johnson, F. B. (Life)
1220 South 24th St.
(Alma)
Johnson, H. H.
1101 Federal Sec. Bldg.
Larson, George E.
1127 Sharp Bldg.
Lewis, G. E.
315 Sharp Bldg.
Lewis, L. G. H.
943 Stuart Bldg.
Loudon, John R.
1110 Sharp Bldg.
Loveland, Grace
909 Sharp Bldg.
Lyman, R. A. (Life)
1649 South 21st St.
MacHaffie, R. A.
V.A. Hospital
Marx, L. E.
901 Federal Sec. Bldg.
Marx, Paul D.
901 Federal Sec. Bldg.
Matheny, Z. E. (Life)
504 Barkley
Matson, Guy M.
2730 North 48th St.
Maxwell, Paul J.
307 South 16th St.
McCarthy, T. F.
5 Nebr. Theatre Bldg.
McGinnis, Kenneth T.
1037 Stuart Bldg.
McGreer, John T., Jr.
924 Sharp Bldg.
McLeay, H. L.
State Hospital
Miller, Harold B.
3910 South 40th St.
Miller, N. R.
914 Federal Sec. Bldg.
Miller, S. D.
5515 South St.
Misko, G. H.
308 First Natl. Bank Bldg.
Mitchell, Howard E.
2300 South 13th St.
Morgan, Harold S.
935 Stuart Bldg.
Morton, H. B.
1037 Stuart Bldg.
Mueller, R. F.
626 Sharp Bldg.
Munger, A. D.
1016 Sharp Bldg.
Munger, Horace V.
1016 Sharp Bldg.
Munger, I. C.
3350 Grimsby Lane
Neely, J. Marshall
924 Sharp Bldg.
Neely, Orvis A.
924 Sharp Bldg.
Olney, R. C.
901 South 48th St.
Orr, H. W. (Life)
2300 South 13th St.
Owen, L. J.
957 Stuart Bldg.
Palmer, Janet Forbes
1027 Sharp Bldg.
Parrillo, Orest J.
V.A. Hospital
Paul, James R.
Sioux City, Iowa
Paulson, H. O.
508 Sharp Bldg.
Pelikan, C. C.
(Deceased 1-19-53)
Peterson, J. C.
702 Sharp Bldg.
Peterson, Paul L.
702 Sharp Bldg.
Pfeifer, LaVern F.
903 Sharp Bldg.
Place, George E.
4825 St. Paul St.
Podlesak, J. I.
612-614 Trust Bldg.
Purvis, Donald F.
800 South 13th St.
Raasch, Richard F.
1037 Stuart Bldg .
Rausten, David S.
4723 Prescott St.
Reed, E. B.
1037 Stuart Bldg.
Reese, S. O.
816 Sharp Bldg.
Rider, Larry D.
Wichita, Kansas
Ritter, Jerome
800 South 13th St.
Rogers, E. A.
3913 Sheridan Blvd.
(Saunders Co.)
Rogers F. L.
1325 Sharp Bldg.
Rogers, John W.
6125 Havelock Ave.
(Southwest Nebr.)
Rose, Forrest I.
1203 Sharp Bldg.
Rose, Kenneth D.
1614 "N" St.
Rowe, E. W.
1037 Stuart Bldg.
Royal, P. A.
5515 South St.
Ryerson, Edwin R.
2011 South 19th St.
Sanderson, D. D.
914 Stuart Bldg.
Scott, H. A.
(Deceased, 11-12-53)
Shaffer, Harry D.
724 Sharp Bldg.
Sharrar, Lynn E.
719 Sharp Bldg.
Smith, A. L.
1001 Federal Sec. Bldg.
Smith, A. L., Jr.
1001 Federal Sec. Bldg.
Smith, Russell T.
4834 Bancroft
Spieler, F. B.
1037 Stuart Bldg.
Spradling, F. L.
State Hospital
Stafford, G. E.
800 South 13th St.
Stapleton, H. B.
Hickman, Nebr.
Stein, Robert J.
430 Stuart Bldg.
Steinman, John F.
620 Sharp Bldg.
Stemper, Jack M.
Student Health Center,
University of Nebr.
Stewart, Frank A.
1667 South St.
Stone, Frank P.
2300 South 13th St.
Stover, Lee
1037 Stuart Bldg.
Strader, R. M.
430 Stuart Bldg.
Taborsky, A. F.
324 First Natl. Bank Bldg.
Tanner, Frank H.
2929 South 29th St.
Taylor, Bowen E.
1037 \Stuart Bldg.
Taylor, H. A.
4728 St. Paul St.
Taylor, J. D.
4728 St. Paul St.
Teal, F. F. (Life)
910 Sharp Bldg.
Teal, Fritz
2300 South 13th St.
Thierstein, Samuel T.
1301 Sharp Bldg.
Thomas, R. L.
601-605 Stuart Bldg.
Thompson, J. C.
307 South 16th St.
Thomson, J. E. M.
1108 Sharp Bldg.
Thorough, Paul H.
824 Sharp Bldg.

Underwood, G. R.
233 South 10th St.
Walker, G. H.
412 Lincoln Lib. Life Bldg.
Wallace, Hobart E.
(Service)
2644 Ryons
Walske, Benedict R.
V.A. Hospital
Warner, Ruth
909 Stuart Bldg.
Webb, A. H.
1614 "N" St.
Webster, F. S.
1108 Sharp Bldg.
Wegner, E. S.
724 Sharp Bldg.
Welch, J. S.
1037 Stuart Bldg.

Wendt, Bernard F.
315 First Natl. Bank Bldg.
Whitham, Roy H.
921 Stuart Bldg.
Whitlock, H. H.
805 Sharp Bldg.
Wiedman, E. V.
315 First Natl. Bank Bldg.
Wiedman, J. G.
315 First Natl. Bank Bldg.
Williams, J. B. (Life)
601 Metropolitan Apt.
Wilson, Nat J.
V.A. Hospital
Wolters, S. L.
2217 "A" St.
Wood, Maynard A.
1037 Stuart Bldg.
Woodward, J. M.
910 Sharp Bldg.
Wright, F. T.
State Hospital

Youngman, R. A.
1037 Stuart

CASS

AVOCA
Brendel, J. W.
ELMWOOD
Liston, Howard E.
Liston, O. E.
LOUISVILLE
Worthman, H. W.
MURRAY
Tyson, R. W.
NEHAWKA
Andersen, R. R.
PLATTSMOUTH
Brendel, R. F.
Dietz, Robert J.
Pucelik L. S.
WEEPING WATER
Kunkel, L. N.

OTOE

NEBRASKA CITY
Bonebrake, A. H.
Burbridge, Glen E.
Edmonds, William (Life)
Fenstermacher, R. C.
(Nemaha Co.)
Gilligan, J. P.
Kenner, W. C.
MacVean, M. M. (Life)
Ramacciotti, W. S.
Stonecypher, D. D.
Weekes, T. L.

SYRACUSE
Formanack, C. J.
Gately, H. S.
Williams, C. R.
Za tera, J. R.
(Service)

THIRD DISTRICT

J. C. WADDELL, Councilor

GAGE

ADAMS—
Waggener, J. T.
BEATRICE—
Branson, V. L.
Brott, Clarence R.
Brown, H. R.
Brown, R.
Bryant, A. R.
Edstrom, Henry
Elias, H. F.
Hepperlen, H. M., Jr.
McCleery, D. P.
(Tucson, Ariz.)
McGirr, J. I. (Life)
Penner, Donald
Penner, Elmer L.
(Service)
Penner, H. G.
Rathbun, Sanford M.

Taylor, R. W.
Waddell, J. C.
Waddell, W. W.
Wildhaber, J. B.
(Service)
Wildhaber, Wm. T.
LIBERTY—
Bachle, E. P. (Life)
ODELL—
Rice, C. E.
WYMORE—
Nelson, J. C.
Sutton, David K.
Thomas, C. W.

PAWNEE

PAWNEE CITY—
Anderson, A. B., Jr.
Stewart, H. C.

NEMAHA

AUBURN—
Cline, Edgar
Irvin, I. W.
Krampert, F. L.
Scott, Paul M.
Tushla, F. M.
PERU—
Wiggins, G. E.

RICHARDSON

DAWSON—
Ulmer, Walter P.
FALLS CITY—
Brennan, Louis V.
Cowan, S. D.
Crook, Guy H.
Gillispie, J. C.
Glenn, W. V.

Hustead, C. L.
Ketter, W. D.
Lennemann, Ernest
Shepherd, Wm.
HUMBOLDT—
Heim, H. S.
Stappenbeck, A. P.
SHUBERT—
Shook, W. E.

JOHNSON

STERLING—
Miller, W. R.
Axtell, Kansas
Turner, J. W. (Life)
(Deceased 3-6-53)
TECUMSEH—
Chadek, Leonard J.
Lanspa, J. A.

FOURTH DISTRICT

W. E. WRIGHT, Councilor

MADISON

(Madison Six County)

BATTLE CREEK—
Rudloff, F. X.
MADISON—
Garner, F. L.
McClanahan, Frank C., Jr.
NEWMAN GROVE—
Carlson, Emery W.
NORFOLK—
Barry, A. C.
Brauer, S. H.
Brush, E. L.
Bulawa, Francis A.
Carey, Blaine P.
Charlton, George E.
Conwell, G. D.
Farner, B. R.
Ingham, Chas. G.
Johnson, L. A.
Johnson, R. E.
Pollack, F. A.
Pollack, John D.
Salter, George B.
Schwedhelm, A. J.
Slaughter, Earl C.
Slaughter, Guy P.
Slaughter, Pauline K.
Stewart, George J.
Surber, E. G.
Verges, C. J.
Verges, Val C.
TILDEN—
Barr, Carl C.
Barr, Robert E.
Salsburg, H. E.

CUMING

(Madison Six County)

WEST POINT—
Anderson, A. W.
Bankead, J. H.
Thompson, I. L.
WISNER—
Hansen, Warren D.

PIERCE

(Madison Six County)

OSMOND—
Maillard, A. E.
PIERCE—
Calvert, John H.
Devers, W. I.
PLAINVIEW—
Johnson, M. A.
Kopp, Robert E.

KNOX

(Madison Six County)

CREIGHTON—
Green, Carl R.
Wright, W. E.
BLOOMFIELD—
Kohtz, R. H.
NIOBRARA—
Neil, Stanley Roy

STANTON

(Madison Six County)

PILGER—
Reid, J. D.
STANTON—
Tennant, H. S.

ANTELOPE

(Madison Six County)

CLEARWATER—
Bennie, J. W.
ELGIN—
Graham, W. W.
NELIGH—
Curtis, E. E.
Harrison, U. S.
Pierson, Kenneth
ORCHARD—
Fletcher, D. L.

CEDAR

(Five County)

COLERIDGE—
Dewey, F. G.
HARTINGTON—
Dorsey, F. P., Jr.
Dorsey, F. P., Sr. (Life)
(Omaha)
Kovar, J. D.
LAUREL—
Carroll, R. P.
RANDOLPH—
Billerbeck, Henry J.
Peters, G. E.

DIXON

(Five County)

PONCA—
Bray, R. E.
WAKEFIELD
Cee, C. M.

THURSTON

(Five County)

PENDER—
Buhl, C. E.
Euclid, Ohio
Keown, J. T., Jr.
Muffly, Chas. G.
WINNEBAGO—
Kantor, Lester J.
Kerrville, Texas

DAKOTA

(Five County)

HOMER—
Barber, H. G.
SOUTH SIOUX CITY—
Gathman, L. T.
Larsen, A. A.
Maher, Louis L.

WAYNE

(Five County)

WAYNE—
Benthack, Robert B.
(Service)
Benthack, Walter
Crantz, Paul E.
San Francisco, Calif.
Ingham, C. T. (Life)
Alhambra, Calif.
Matson, Roy M.
WINSIDE—
Craig, D. O.

FIFTH DISTRICT

R. T. VAN METRE, Councilor

DODGE

AMES—
Smith, A. J.
DODGE—
Srb, G. J.
FREMONT—
Byers, Robert C., Jr.

Deal, E. P.
Fasser, A. O.
Harvey, Andrew
Haslam, G. A.
Heine, L. H.
Heine, W. H.
Hill, W. H.
Jakeman, Harry A.

Malloy, E. F.
Merrick, A. J.
Morrow, H. H.
Morrow, H. N. (Life)
Nelson, Carrol C.
Reeder, Grant
Reeder, Robert C.
Seiver, Charlotte

Van Metre, R. T.
Wengert, D. B.

HOOPER—
Simmons, J. R.

SCRIBNER—
Stehl, C. H. L.

WASHINGTON

ARLINGTON—
Block, D. M.
(Dodge)
Davies, R. A.
(Dodge)
BLAIR—
Goehring, W. E.
Howard, C. D.
Nielsen, Morris
Seivers, Rudolph

MERRICK

CENTRAL CITY—
Brown, A. D.
Fouts, F. (Life)
Holmes, Lee C.
Pischke, Eugene F.
(Northwest Nebr.)
Zikmond, E. T.
(Service)
CLARKS—
Douglas, R. R.
PALMER—
Racines, J. Y.
(Howard County)

COLFAX

CLARKSON—
Kavan, W. J.
LEIGH—
Wagner, Lloyd R.
SCHUYLER—
Kavan, Lucian Cyril
Kolouch, F. G.
Myers, H. Dey, Jr.

BOONE

ALBION—
Davis, J. E.
(Deceased 7-19-53)
Fitch, Wm. M.
Smith, J. W. B. (Life)
Kalispel, Mont.
Smith, Roy J.
CEDAR RAPIDS—
Reeder, W. J.
ST. EDWARD—
Harger, John R.
Henderson, Harry C.

BURT

DECATUR—
Williams, Harry G.
LYONS—
Hayes, C. B.
OAKLAND—
Benson, H. W. (Life)
Winter Park, Fla.
Simmons, Cecil F.
Tibbels, R. H.
TEKAMAH—
Allen, J. G.
Lukens, I.
Morrow, L.
Sauer, L. E.

PLATTE

COLUMBUS—
Allenburger, C. A. (Life)
Anderson, R. C.
Brillhart, E. G.
Campbell, C. H. (Life)
Deyke, Vern F.
Heiser, E. N.
James, M. C.
(Deceased 9-11-53)
Johnson, F. G.
Koebbe, E. E.
Kuper, H. D.
McGowan, P. H.
Meyer, J. E.
Neumarker, W. R. (Life)
HUMPHREY—
Abts, A. W.
(Omaha)
Klaas, R. E.
(Polk Co.)
PLATTE CENTER—
Slavik, Ed R.

NANCE

FULLERTON—
Maly, James C.
GENOA—
Dalton, Kenneth R.
Davis, Homer (Life)
Hartsaw, John E.
Williams, C. D.

SIXTH DISTRICT

ROBERT HARRY, Councilor

BUTLER

DAVID CITY—
Burdick, D. E.
Ekeler, Louis J.
RISING CITY—
Longacre, O. E. (Life)

SEWARD

BEAVER CROSSING—
Hille, C. F.
SEWARD—
Carr, J. W.
Clarke, H. D.
Hill, W. Ray
Morrow, B. E.
Posey, John W.
Stanard, John T.
STAPLEHURST—
Herpolsheimer, R. W.

SAUNDERS

ASHLAND—
Baer, B. H.
Packer, J. M.
Williams, Martin P.
CERESCO—
Noyes, W. W.
MORSE BLUFF—
Hubenbecker, J. C.
WAHOO—
French, Ivan M.
Hinrichs, E. J.
(Fillmore)
Kent, Donald C.
(Service)
Lathrop, M. E.
Pestal, Joe (Life)
Wallace, Stephen E.
Way, Charles
YUTAN—
Friesen, H. F.

YORK

YORK—
Anderson, Leo
(Omaha-Douglas)
Bell, H. O.
Bell, James D.
Bell, J. S.
Greenberg, B. N.
Harry, R. E.
Karrer, Robert E.
Kilgore, W. S.
Root, B. A.

HAMILTON

AURORA—
Steenburg, D. B.
Steenburg, E. A.
Steenburg, E. K.
Woodard, J. M.
GILTNER—
Marvel, P. O.
HAMPTON—
Troester, O. M.

POLK

OSCEOLA—
Eklund, H. S.
SHELBY—
Delfs, Richard C.
(Service)
Daum, Harold F.
STROMSBURG—
Anderson, C. L.

SEVENTH DISTRICT

F. A. MOUNTFORD, Councilor

SALINE

CRETE—
Forney, L. W.
Homan, Richard W.
Huber, Paul J.
Stejskal, F. J.
DE WITT—
Runty, H. D.
(Gage Co.)
FRIEND—
Hamilton, F. T.
Zimmer, Clarence
WILBUR—
Travnicek, F. G.

THAYER

ALEXANDRIA—
Tucker, J. Guy
BYRON—
Decker, Rudolph F.
CARLETON—
Douglas, V. D. (Life)
DESHLER—
Reed, Paul A.
DAVENPORT—
Mountford, F. A.
HEBRON—
Bunting, L. G.
Penry, R. E.

NUCKOLLS

NELSON—
Ingram, J. E.
SUPERIOR—
Brown, Byron L.
Mason, C. T.
McMahon, C. G.
Trowbridge, J. A.
Webman, A. I.

FILLMORE

GENEVA—
Ashby, A. A.
Ashby, Chas. F.
Lynn, Vincent S.
MILLIGAN—
Smrha, V. V. (Life)

JEFFERSON

FAIRBURY—
Cassel, R. L.
(Service)
Hughes, D. O.
Kantor, D. B.
Kenney, K. J.
Luce, R. P.
Lynch, George M.
(Service)
Lynch, J. H.
Yoachim, W. P.

CLAY

EDGAR—
Berrick, Wm. H.
SUTTON—
Nuss, H. V.
DENVER, COLO.—
Nutzman, C. L.

EIGHTH DISTRICT

R. R. BRADY, Councilor

SHERIDAN

(Northwest Nebraska)

GORDON—
Wanek, Frank
Wolf, W. K.
RUSHVILLE—
Crum, H. V.
Hook, R. L.

BOYD

(Holt and Northwest)

LYNCH—
David, Joseph J., Jr.

ROCK

BASSETT—
Panzer, H. J.
Stoez, Paul A.
(Service)

HOLT

ATKINSON—
McKee, N. P.
Ramsey, James E.
O'NEILL—
Brown, J. P.
Finley, W. F.
French, O. W.
Wilson, Rex W.
STUART—
Clark, F. J.

BROWN

AINSWORTH—
Brady, R. R.
Lear, W. D.
Shiffermiller, Floyd

CHERRY

VALENTINE—
Deakin, Thos. W.
Farner, John
Johnson, Wilbur Ed

NINTH DISTRICT

B. R. BANCROFT, Councilor

HALL

GRAND ISLAND—
Anderson, H. C.
Anderson, John S.
Arrasmith, W. J.
Bosley, Warren G.
Brugh, E. A.
(Service)
Buchanan, Rea
Campbell, John F.
DeMay, G. H.
DeMay, Richard F.
Easley, John H.
Farnsworth, Earle
Santa Barbara, Calif.
Geer, Robert R.
Gilloon, A. G.
Graupner, G. W.
Holland, Robert E.
Hombach, W. H.
Hombach, W. H., Jr.
(Service)
House, Robert
Imes, Loren E.
Johnson, Earle G.
Maggiore, Carl H.
Martin, R. D.
McDermott, K. F.
McGrath, Wilmer D.
McGrath, Wm. M.
Mongeau, D. C.
Nabity, Stanley F.

Profitt, J. Alfred
Ryder, Frank D.
Synhorst, A. P.
Watson, Donald
Watson, E. A.
Wells, J. Ralston
Woodin, J. G.
Woodruff, Bradley
WOOD RIVER—
King, F. Ervin

BUFFALO

ELM CREEK—
Laughlin, J. W.
GIBBON—
Harris, R. S.
Bakers Field, Calif.
Rodman, H. H.
(Service)
Colorado Springs, Colo.
KEARNEY—
Bancroft, B. R.
Elliott, Thos. S.
Enos, A. A.
(Service)
Hansen, H. C.
Harrison, Merle A.
Jester, R. F.
Johnson, O. D.
Johnson, Richard D.
Johnson, Robert O.
Johnston, Raymond F.
Johnston, R. S.
Lane, L. D.
Nutzman, Wm.
Nye, Dan A.
Richards, F. L.
Rose, W. E.
Sisler, Frank H.
Smith, Harold V.
Staley, Sanford
Steffens, L. C.
Wilcox, M. B.
RAVENNA—
Dickinson, L. E., Sr.
Ehlers, O. C.
SHELTON—
Nordstrom, J. E.
Wiltse, C. E.

CUSTER

ANSELMO—
Spivey, C. D.
ARNOLD—
McShane, R. A.
BROKEN BOW—
Blair, R. L.
Bowman, C. L.
Carothers, P. H. J.
Erickson, G. T.
Koefoot, Theo.
Koefoot, Theo., Jr.
Wilcox, C. W.
CALLOWAY—
Bryson, R. D.
Chaloupka, M. L.
SARGENT—
McDaniel, V. S.

DAWSON

COZAD—
Hranac, Chas. Eugene
Sheets, C. H.
EDDYVILLE—
Kile, J. B.
GOTHENBURG—
Ayres, M. J.
Harvey, H. M. (Life)
Perry, S. H.
Pyle, B. W.
LEXINGTON—
Anderson, A. W.
McGee, Dean
Norall, V. D.
Olsson, P. Bryant
Watson, E. A.
(Service)
Wycoff, R. S.
OVERTON—
Swanson, Robert F.
(Buffalo Co.)

HOWARD

ST. PAUL—
Arnold, M. O.
Hanisch, E. C.
Hanisch, Robert
(Service)

GREELEY
(Four County)

SCOTIA—
Lewis, James E.
(Service)
(Howard Co.)
SPALDING—
Fox, Robert J.
Sullivan, M. M.
WOLBACH—
Holm, A. H.
(Howard Co.)

VALLEY
(Four County)

ARCADIA—
Moss, N. H.
NORTH LOUP—
Markley, M. E.
ORD—
Barta, F. A.
(Napa, Calif.)
Lynn, Robert J.
Martin, Paul R.
Miller, C. J.
Miller, Otis W.

GARFIELD
(Four County)

BURWELL—
Cram, Roy S.
Zemple, Alan R.

SHERMAN
(Four County)

LITCHFIELD—
Rydberg, C. A.
(Custer Co.)
LOUP CITY—
Amick, C. G.
(Custer Co.)
Miller, Burdette L.
(Custer Co.)

GRANT

HYANNIS—
Howell, W. L.
(Box Butte Co.)

TENTH DISTRICT

F. M. KARRER, Councilor

ADAMS

HASTINGS—
Anderson, H. F.
Charlton, George Paul
DeBacker, L. J.
Egen, L. F.
Feese, J. P.
(Life)
Foote, C. M.
Foote, D. B.
Foote, E. C.
Guildner, C. W.
Hoffmeister, George F.
Holm, Chas. R.
Kingsley, D. W.
Kleager, Clyde L.
Kostal, O. A.
Kuehn, Gerald A.
Mace, John L.
McIntire, Robert
McMillon, John A.
Moessner, Samuel
Iowa City, Iowa
Pinney, George L.
Richard, Warren E.
Shaw, W. L.
Reseda, Calif.
Smith, A. A.
Uridil, J. E.
Weber, C. R.

INGLESIDE—
Davies, D. M.
Gouldman, Carl
Lytton, G. J.
Meyer, Hans
(Butlerville, Ind.)
O'Donnell, H. J.
Sandritter, G. L.
Shelton, S. W.
KENESAW—
McIntire, R. J.
McReynolds, R. K.
Placeville, Calif.

FRANKLIN

CAMPBELL—
McNeill, L. S.
FRANKLIN—
Doering, William
Rosenberg, D. S.
(Deceased 3-15-53)
Smith, Hal C. (Life)
Spokane, Wash.

HARLAN

ALMA—
Agee, L. G.
Bartlett, W. C.
Ekart, Paul I.
Iowa City, Iowa
Kerr, R. H.
ORLEANS—
McGrew, K. C.
Rider, E. E. (Life)
(Lancaster Co.)

WEBSTER

BLUE HILL—
O'Neill, S. H.
(Deceased 6-4-53)
GUIDE ROCK—
Reed, H. S.
(Nuckolls Co.)
RED CLOUD—
Bennett, Wilbur Keith
Lull, C. C.
(S.W. Nebr.)
Obert, Francis

RED WILLOW
(Southwest Nebr.)

McCOOK—
Batty, John L.
Dickinson, L. E., Jr.
Donaldson, J. H.
James, L. D.
Jones, R. T.
Karrer, F. M.
Leininger, E. F.
Morgan, D. H.
Morgan, Donal H.
Shank, F. W.

DUNDY COUNTY
(Southwest Nebr.)

BENKLEMAN—
Morehouse, G. A.

CHASE
(Southwest Nebr.)

IMPERIAL—
Hoffmeister, George (Life)
Smith, Fay
Yaw, Elwood
WAUNETA—
Carlson, C. R.

HITCHCOCK
(Southwest Nebr.)

PALISADE—
Hoyt, Melvin S.
STRATTON—
Haase, D. D.
(Service)
TRENTON—
Hertz, Harvey
(Service)

FRONTIER
(Southwest Nebr.)

CURTIS—
Magill, Van H.
EUSTIS—
Rosenau, O. P.
(Dawson Co.)

KEARNEY

MINDEN—
Abbott, Hodson A.
(Buffalo Co.)
Andrews, H. S.
(Adams Co.)
Chappell, Elliott R.
(Adams Co.)
Peck, Willard R.
(Buffalo Co.)

FURNAS
(Southwest Nebr.)

ARAPAHOE—
Christensen, Robert H.
CAMBRIDGE—
Minnick, Clarence
Stearns, H. I.
OXFORD—
Bentley, Neil B.
(Four Co.)
Cutshall, Roger
Evans, C. D., Jr.

PHELPS

BERTRAND—
Streeter, Chas. T.
HOLDREGE—
Best, Robert
Brewster, F. W.
Jones, Donald W.
McConahay, H. A.
Peterson, Theo. A.
Reiner, Walter M.

ELEVENTH DISTRICT

C. F. HEIDER, Councilor

LINCOLN

NORTH PLATTE—
Anderson, G. T.
(Service)
Callaghan, A. J.
Carroll, J. V.
Chick, Nicholas
Clarke, H. L.
Dent, T. E.
DeVol, R. A.
Drasky, Stanley
Fetter, E. W.
Heider, C. F.
Kerkhoff, S. A.
Kerr, T. J.
Kreymborg, O. C.
McDonald, H. A.
Niehus, Wm. B.
Pinkerton, Clifford C.
Raines, Max M.
(Omaha-Douglas)
Redfield, J. B.
Reeves, A. E.
Shaughnessy, E. J.
Stevenson, Edward
Takenaga, R. T.
Valentine, L. F.
Walker, H. H.
Waltemath, G. F.
Williams, Perry T.
SUTHERLAND—
Flebbe, Richard
Moore, Harlan E.

LOGAN

STAPLETON—
Carr, E. F. (Life)
(Lincoln Co.)

DEUEL
(Cheyenne, Kimball and Deuel)

CHAPPELL—
Baker, Howard
Colman, A. C.
Rundquist, R. B.

GARDEN
(Garden-Keith-Perkins)

LEWELLEN—
Vesely, Francis V.

OSHKOSH—
Albee, A. B.
Seng, W. G.

KEITH
(Garden-Keith-Perkins)

OGALLALA—
Benner, Robert E.
Harvey, E. A.
Imes, S. K.
Denver, Colo.
McFee, John L.
Weyer, S. M.

PERKINS
(Garden-Keith-Perkins)

GRANT—
Bell, F. M.
Colglazier, E. E.
Thompson, R. L.

TWELFTH DISTRICT
FRANK HERHAHN, Councilor

SCOTTS BLUFF

GERING—
Brown, Wilbert O.
Gentry, W. J.
Gentry, W. Max
Harvey, W. C.
Harvey, W. C., Jr.
(Service)
Wiley, Stuart Paul

MINATARE—
Karrer, R. W.

MITCHELL—
Loeffel, Edwin J.
(Service)
Ohme, Kenneth
Watson, C. R.

MORRILL—
Prentice, O. D.

SCOTTSBLUFF—
Baker, Ellis E.
Baker, Paul Q.
Campbell, Stuart D.
Cowan, L. H.
Frank, Carl L.
Gridley, L. J.
Grubbs, Loran
Hanna, Joe T.
Hayhurst, J. D. *
Heinke, John P.
Herhahn, Frank T.
Holmes, Wm. E.
Hudgel, L. E.
Kreig, Jacob, Jr.
Lovett, Ivan C.
Rasmussen, N. H. (Life)
Riddell, Ted E.
Rosenau, John A.
Sorenson, C. N.

BOX BUTTE

ALLIANCE—
Arrasmith, W. W.
Broz, J. S.
Burnham, A. G.
Fitzgerald, Thos. D.
(Omaha-Douglas)
Johnston, G. F.
Kennedy, J. F.
Kuncl, Joseph K.
McNulty, Edward
Morgan, R. J.
Seng, O. L.
Slagle, C. E. (Life)
Sucgang, F. P.
Whitehead, E. I. (Life)

HEMINGFORD—
Ford, F. Wendell

DAWES
(Northwest Nebraska)

CHADRON—
Courshon, A. J.
DeFlon, Eric G.
Griot, A. J.
Hoevet, L. H.
Pierce, C. M.

CRAWFORD—
Bishop, Ben
Brown, Roy

CHEYENNE
(Cheyenne, Kimball and Deuel)

DALTON—
Pankau, J. B.

SIDNEY—
Bitner, C. U.
Cook, Hull A.
Dorwart, Clinton B.
Grimm, B. H.
Thayer, James E.

KIMBALL
(Cheyenne, Kimball and Deuel)

KIMBALL—
Core, Edwin R.
Shamberg, Alfred H.

MORRILL

BAYARD—
Doher, T. L.
(Scotts Bluff Co.)
(Scotts Bluff Co.)
Spradling, R. L.

BRIDGEPORT—
Blackstone, H. A.
(Scotts Bluff Co.)
Peterson, Byron D.
(Scotts Bluff Co.)
Post, George Peter
(Scotts Bluff Co.)

Know Your Blue Shield Plan

WAYS TO AVOID "MIX-UPS" ON BLUE SHIELD CASES

To save time and prevent confusion on Blue Shield cases, one doctor worked out six points of procedure which reduced misunderstandings and delays in payment to a minimum. We recommend these simple procedures to doctors and their secretaries as sure ways to obtain smooth, speedy service on Blue Shield cases.

1. At the patient's first visit, the secretary asks the patient if he is enrolled in Blue Shield. If he is, she enters in her records the agreement and group numbers shown on his identification card.

2. At the first visit also, the secretary or doctor asks the patient if he is eligible for "service benefits" on the basis of his annual income. If he is, a notation is made on his record card.

3. Before the doctor begins treatment, he tells the patient whether or not benefits for the services are provided by Blue Shield, and what benefits may be anticipated.

4. When the report is submitted, the secretary sees that every item is properly filled in. For unusual procedures or those with a range of payment, full information is given, so that the appropriate payment may be determined.

5. All reports are submitted as soon as the services have been rendered, and a notation is made on the office record to show the date on which the report was sent. This prevents duplicate reports.

6. A statement is not sent to the patient until after the Blue Shield payment has been received. Then, credit for the amount paid by Blue Shield is shown on the patient's statement.

She'd Kill the Goose That Lays the Golden Egg!

"But I still have five days left under Blue Cross . . . and the maid won't be back until Monday!"

Twenty-seven million people are now enrolled in Blue Shield medical care Plans, according to an announcement by the Blue Shield Commission in Chicago, national headquarters of these nonprofit, physician-sponsored organizations.

DOCTOR . . . Please take each copy of your Journal home. The wives complain that they never get to read the Auxiliary column.

Human Interest Tales

Communications bearing human appeal are solicited. They should be addressed to The Editor, Nebraska State Medical Journal, 1315 Sharp Bldg., Lincoln.

Dr. C. W. Guildner, Hastings, has been appointed city physician.

Dr. James R. Frans, is now in the practice of medicine at Milford.

Dr. P. R. Schlumberger has begun the practice of medicine at Gibbon.

Dr. O. G. Burkart, Tiffin, Ohio, is now associated with Dr. E. R. Core in Gordon.

Dr. Howard Liston, Elmwood, is rapidly gaining good health following a recent illness.

Dr. F. G. Kolouch has been named chief of the staff of Memorial Hospital in Schuyler.

Dr. I. W. Brill, Lincoln, spoke at the first meeting of the Lincoln Mental Health Society, during October.

Dr. K. J. Kenney, Fairbury, spoke on the subject of polio at a weekly meeting of the Rotary Club, in Fairbury.

Drs. Frederick G. Gillick and F. W. Niehaus have been elected to the scientific council of the American Heart Association.

Dr. R. W. Blanchard, Council Bluffs, Iowa, has been named president-elect of the Nebraska State Radiological Soceity.

Drs. Louis Campbell and G. E. Stafford, Lincoln, were in charge of the crippled children's clinic at Wayne during October.

Dr. Leland J. Olson, Omaha, addressed the Tri-County Medical Association at its regular meeting in Fremont on October 5.

Dr. J. P. Thomassen, Neligh, has returned home after spending several days in the Antelope Memorial hospital during October.

Dr. R. E. Penry, Hebron, has been appointed as Councilor of the State of Nebraska for the International Academy of Proctology.

Dr. Edward Hinrichs, Geneva, and Dr. Murray Crouse, Omaha, have announced plans to open their offices in Wahoo on November 15.

Dr. F. J. Anderson, Omaha, has returned from service and will resume his practice at 2748 North Sixty-third Street on November 2.

Dr. Robert Melzer and family of Benkelman are now residing in San Antonio, Texas, where Dr. Melzer is stationed at Fort Sam Houston.

M. C. Smith, our Executive Secretary, read a paper on Osteopathy at the North Central Medical Conferenuce at St. Paul, Minn., Nov. 1.

Dr. John R. Schenken, Omaha, was installed as president of the American Society of Clinical Pathologists at the annual meeting in Chicago.

Dr. H. E. Eggers of the University of Nebraska College of Medicine was reappointed to a five-year term on the Board of Examiners in basic sciences.

Dr. E. A. Watson, now on active duty with the Navy, spent a short time at his home in Lexington before returning to duty in Seattle, Washington.

Dr. Richard L. Egan has been appointed Director of Undergraduate Clinical Instruction and Assistant Dean at Creighton University School of Medicine.

Dr. E. A. Rogers, director of the state health department, took part in the dedication ceremonies of the new Sacred Heart Hospital in Loup City, October 25th.

Lt. Richard B. Koefoot, Medical Corps, of Broken Bow, has been assigned to the 1st Infantry Division, 18th Infantry Regiment, at Aschaffenburg, Germany.

Dr. Edwin D. Poulsom, Schuyler, and Miss Theresa Ann Torticill, Onawa, Iowa, were married October 3rd at St. Bernard's Catholic church, at Blencoe, Iowa.

Dr. and Mrs. C. J. Miller, Ord, have returned from Chicago where they attended a "Dr. Percy Day," for Dr. Nelson Percy, noted surgeon of the Augustana Hospital.

Drs. Gordon Cherwitz and Gilbert Carlyle, Omaha, both of whom are now in the armed forces, have been elected as fellows of the American Academy of Pediatrics.

Drs. Stanley Bach and F. J. Ficke, Omaha, were available for consultation at the opening of the new physical therapy department of the Memorial hospital in West Point.

Dr. and Mrs. W. H. Taylor, Omaha, left October 29 on the first lap of a seven-month round-the-world tour. Their itinerary includes Europe, Africa, and the Near and Far East.

Dr. Lad J. Kucera, recently a member of the staff of the Veterans Hospital at Omaha, has been named Chief Medical Officer of the Veterans Administration Center, at Fargo, N.D.

Dr. Charles W. Way of Wahoo has been named to succeed Dr. W. H. McFadden, resigned, as Medical Chief of the Nebraska Regional Veterans Administration Office, Omaha.

Major James E. Lewis, Medical Corps, has been assigned as Division Surgeon of the 1st Infantry Division, with headquarters at Wurzburg, Germany. Major Lewis is from Grand Island.

Dr. and Mrs. J. B. Pankau, Dalton, were hosts at the regular meeting of the Cheyenne-Kimball-Deuel County Medical Society recently. Dr. C. N. Sorenson, Scottsbluff, was the guest speaker.

Dr. J. A. Henske, Omaha, attended the American Academy of Pediatrics in Miami, Florida, and also the seventh international meeting of pediatricians at Havana, Cuba, during the month of October.

Dr. Carl G. Amick, Loup City, was chairman of the dedication program of the new Sacred Heart hospital, others present were Dr. Burdette L. Miller, on leave from the navy, and Dr. J. H. Bogle.

Drs. E. E. Colglazier and R. L. Thompson, were present at the ceremonies which saw the Perkins

County Community hospital become free of debt. Final payment was made at the regular board meeting.

"Doctor Reid Day," October 22, was a special day in Pilger in honor of Dr. John Reid for 50 years of service to the Pilger community. It also marked the golden wedding anniversary of Dr. and Mrs. Reid.

Dr. Elton W. Newman, formerly of Omaha, was one of four professional persons appointed to carry out the new "Family Care" program at the University of Utah College of Medicine, Salt Lake City, Utah.

Dr. James F. Kelly, president of the Nebraska State Medical Association and Dr. H. H. Davis, professor of surgery at the University of Nebraska, were guest speakers at the Nebraska Conference School of American Cancer Society recently in Omaha.

Dr. P. M. Bancroft, Lincoln, was the guest speaker at the combined group of Buffalo County Home Economists, Junior Woman's Club, and Pre-School Study Group, on October 15, in Kearney. Dr. Bancroft spoke on "Growth and Development of the Child."

Ten Nebraska surgeons were inducted as "Fellows of the American College of Surgeons," October 9 in Chicago. They were Drs. F. S. Webster, Lincoln; M. M. Raines, North Platte, and G. T. Alliband, E. K. Connors, J. J. Grier, M. E. Grier, J. F. Gross, R. H. Rasgorshek, and S. H. Truhlsen, all of Omaha.

About 100 staff members of county public welfare departments in Nebraska attended the 10th annual Nebraska Social Work Institute in Lincoln recently. Dr. Richard Garlinghouse, chairman of the Nebraska State Medical Association Governmental Advisory Committee, discussed the subject "The Medical Profession and the Public Assistance Program."

TUBERCULOSIS ABSTRACTS

(Continued from page 444)

behave toward the hydrazide in a manner other than that of the monocytes or, more likely, that some factor in the in vivo environment antagonizes antibacterial activity. The problem of the existence in tuberculous lesions of substances capable of inhibiting antimicrobial drugs is one worthy of attention. Areas of necrosis, particularly of caseation necrosis, contain a variety of partially broken-down tissue components of unknown chemical composition, many of which are likely to act as drug inhibitors. The finding that drugs penetrate caseous matter is no warrant, therefore, that they can exert their antibacterial action in the physiochemical environment of the lesion.

Bacilli ofen disappear spontaneously from certain types of lesions, without the help of chemotherapy. This fact is so well documented that there is no need to give more evidence of it. The presence in animal tissues of several substances might be responsible for this effect. These substances are: (a) The naturally occurring amines, spermine and spermidine. (b) The enzyme lysozyme which does not lyse the bacilli, but can kill them rapidly even in highly dilute solution (1:100,00). (c) A basic polypeptide which has been recently isolated from the thymus gland.

Organic acids accumulate in and around tuberculous lesions as a result of the anaerobic metabolism of inflammatory cells and of the activity of the lipolytic enzymes released during necrosis. Bacilli are unable to multiply in ordinary media, and fail to infect laboratory animals, after exposure for several weeks to physiologic concentration of the sodium salts of several organic acids. Sterilization of the cultures occurs when the atmosphere is completely or partially anaerobic and when the CO_2 tension is higher than normal. These are precisely the conditions prevailing in certain types of closed lesions.

There is another problem which has loomed very large during the past two years, namely, whether the bacillary forms which can be seen in resected lesions but which fail to grow in culture media and to cause disease in experimental animals should be regarded as "dead," or merely dormant but potentially viable, bacilli. None of the evidence adduced so far is of much help in answering it. In my opinion, the techniques used by the various investigators were not adequate to determine the potential viability of dormant bacillary forms.

Organisms in which respiration is at a low level may merely have exhausted an essential metabolite, or being in a resting form akin to that of spore, and yet may be able to multiply when placed in the proper environment. This type of apparent death followed by revival under other conditions is common in many fields of microbiology.

Finally, one should not overlook the fact that tubercle bacilli are present not only in the parenchymatous lesions but also in lymphatic tissues. In cattle which have received a virulent infection after vaccination with BCG and show no overt sign of tuberculosis, the virulent bacilli can invariably be found in lymph nodes for months and years thereafter. It is known that even BCG bacilli can persist for several years in the lymph nodes of man and animal. Laboratory experiments have revealed, furthermore, that prolonged therapy with isoniazid fails to eradicate BCG infection.

All these facts leave the impression that no technique is as yet available to bring about with certainty a complete eradication of the bacilli from infected tissue. After antimicrobial drugs have ceased to exert their restraining influence on infection, either because the infective organisms have become resistant to them or because therapy has been interrupted, only the resistance of the host can act as a brake on reactivation of disease caused by the bacilli surviving here and there, detectable or not by the classical methods of pathology and bacteriology.

—By Rene J. Dubos, Ph.D., The American Review of Tuberculosis, June, 1953.

The late Dr. Jokichi Takamine, of Japan, who isolated Ardenalin in 1900, was lauded on his 100th birthday for his "scientific discoveries, international trade contacts and great humanitarian interests."

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